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NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MARYLAND





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1995 U.S. NAVY/MARINE CORPS MATCHED MALE AND FEMALE ANTHROPOMETRIC ELIGIBLE PILOT DATABASES

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United States Navy

Naval Air Warfare Center

1995 US Navy/Marine Corps Matched Male and Female Anthropometric Eligible Pilot Databases

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PREFACE

This report presents a derived database describing the anthropometry of a potential future United States Naval/Marine Corps (hereafter referred to as "Naval") aviation population. The creation of this database was in response to a Congressional mandate to expand present design specifications to ensure that future military equipment will fit a larger proportion of the United States population. By accommodating more people, occupational choices will not be substantially limited by fit and accommodation issues.

Anthropometric databases containing extensive body size and shape information are critical for the proper design and sizing of military clothing, equipment, and workstations. The last anthropometric survey of Naval aviators was conducted in 1964 on men only. No valid anthropometric data has been collected on female aviators. Statistical matching procedures were used to create an updated Naval aviation anthropometric database of 70 dimensions for males and females from the 1988 Anthropometric Survey of US Army Personel (ANSUR). The summary statistics and descriptions of the 70 selected dimensions are presented along with correlations, regression equations, and bivariate frequency tables.

This database should be used with the caution that because it represents a future population, it cannot be known how well it will represent that population. Future changes in immigration trends, military induction policy, and other variables may affect representivity. Nonetheless, this database represents a scientific, rational approach toward complying with the Congressional mandate.

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1995 US NAVY/MARINE CORPS MATCHED MALE AND FEMALE ANTHROPOMETRIC ELIGIBLE PILOT DATABASES

CHAPTER I

ELIGIBLE PILOT DATABASES

INTRODUCTION

All US Military and many foreign services compile and maintain extensive collections of body size information used primarily to guide the design and sizing of clothing, personal protective equipment, work stations, and computergenerated human models. In order to be effective, such a database must be updated periodically to accurately reflect the body sizes and proportions of the military population it purports to represent.

The US Navy requested that statistically matched male and female eligible pilot databases be created for use in the design of clothing, individual equipment, and workstations for future Navy/Marine Corps (MC) flying populations. The creation of a database representing a potential future population has been necessitated by Congressional orders that mandate the expansion of present design specifications so that future military equipment will fit a larger proportion of the United States population, thereby increasing an individual's choice of military occupations. If equipment is not designed in this manner, capable soldiers may not be able to choose a specific occupation simply because the cockpit, workstation, or protective clothing do not fit properly. Implementation of the Congressional mandate will allow under-represented groups to fully participate in military service.

DATABASE MATCHING

To successfully create a statistically matched anthropometric database, the demographic distribution of the target population must first be determined. Age and race are the primary demographic variables to be controlled since together they explain a large proportion of the anthropometric variation present in a given population^{1,2,3}. Before statistically matched databases could be created, the most likely age and race profile of the eligible pilot population had to be determined. In addition, certain requirements integral to the pilot mission, such

Table 1.	Table 1. June 1994 Navy/MC Male Pilot Population						
	White	Black	Hispanic	Am Indian	Asian	Totals	
Age							
23-25	820	12	23	5	20	880	
	4.70%	0.10%	0.10%	0.00%	0.10%	5.00%	
26-30	6004	164	198	33	101	6500	
	34.30%	0.90%	1.10%	0.20%	0.60%	37.10%	
24.25	4406	105	104	20	66	4424	
31-35	4106	105	124	20	66	4421 25.20%	
	23.40%	0.60%	0.70%	0.10%	0.40%	25.20%	
≥ 36	5515	74	77	17	37	5720	
_ 55	31.50%	0.40%	0.40%	0.10%	0.20%	32.60%	
		2	1				
Totals	16445	355	422	75	224	17521	
	93.90%	2.00%	2.40%	0.40%	1.30%	100%	

Table 2. June 1994 Navy/MC Female Pilot Population						
White	Black	Hispanic	Am Indian	Asian	Totals	
26	4	4	0	0	20	
13.80%	0.40%	0.40%	0.00%	0.00%	38 14.60%	
123	5	4	n	2	134	
47.10%	1.90%	1.50%	0.00%	0.80%	51.30%	
56 21 50%	0 0.00%	1 0.40%	1 0.40%	0 0.00%	58 22.20%	
21.0070	0.0070	0.4070	0.4070	0.0070	22.2070	
30 11.50%	0 0.00%	1 0.40%	0 0.00%	0 0.00%	31 11.90%	
245 93.90%	6 2.30%	7 2.70%	1 0.40%	2 0.80%	261 100%	
	White 36 13.80% 123 47.10% 56 21.50% 30 11.50%	White Black 36 1 13.80% 0.40% 123 5 47.10% 1.90% 56 0 21.50% 0.00% 30 0 11.50% 0.00%	White Black Hispanic 36 1 1 13.80% 0.40% 0.40% 123 5 4 47.10% 1.90% 1.50% 56 0 1 21.50% 0.00% 0.40% 30 0 1 11.50% 0.00% 0.40%	White Black Hispanic Am Indian 36 1 1 0 13.80% 0.40% 0.40% 0.00% 123 5 4 0 47.10% 1.90% 1.50% 0.00% 56 0 1 1 21.50% 0.00% 0.40% 0.40% 30 0 1 0 11.50% 0.00% 0.40% 0.00%	White Black Hispanic Am Indian Asian 36 1 1 0 0 13.80% 0.40% 0.40% 0.00% 0.00% 123 5 4 0 2 47.10% 1.90% 1.50% 0.00% 0.80% 56 0 1 1 0 21.50% 0.00% 0.40% 0.40% 0.00% 30 0 1 0 0 0.00% 30 0 1 0 0 0.00% 11.50% 0.00% 0.40% 0.00% 0.00% 245 6 7 1 2	

as educational level, must be considered when identifying the eligible pilot population in the US. Therefore, educational attainment must also play a significant role in a database designed to represent this population.

Based upon the premise that a student pilot must have a college degree, it is implied that a college graduate is also a potential pilot. Therefore, Department of Education (DOE) data describing the frequency of Bachelor's degrees conferred in the United States by racial group were chosen as a model for the racial distribution of a potential pilot population (see Tables 3 and 4). The DOE data are more appropriate than census data, such as the Educational Attainment Survey, because census data are self-reported, thus inviting error associated with memory recall. In addition, census data account only for some fraction of the population, thereby not providing a true account of the racial distribution of all college graduates. Census data may also be fraught with other types of error⁴.

The DOE demographic data for Bachelor's degrees conferred by institutions of higher education during the years 1989-1990, 1990-1991, 1991-1992 provided the basis for estimating the racial distribution of the eligible pilot population. These were the most recent data available at the time of the study. Male and female data were addressed separately, and non-resident aliens were not included since they cannot serve in the US military. For use in the statistical matching process, a three year average was computed from these data for all five racial groups (White, non-Hispanic; Black, non-Hispanic; Hispanic; Asian/Pacific Islander; and American Indian/Alaskan Native) for both males and females (Tables 3 and 4). Taking an average of the conferral rates is preferred over using the rates from an individual year because averaging stabilizes the contribution of smaller minority groups and provides the most statistically conservative approach⁵.

Table 3. Male Department of Education Race Distribution of Bachelor's Degrees Conferred							
	1989 - 1990	1990 - 1991	1991 - 1992	Three Year Average			
White	87.74%	86.82%	85.93%	86.83%			
Black	4.93%	5.08%	5.39%	5.14%			
Hispanic	3.17%	3.38%	3.59%	3.38%			
Asian	4.18%	4.32%	4.65%	4.38%			
Am Indian	0.39%	0.40%	0.44%	0.41%			

Table 4. Female Department of Education Race Distribution of Bachelor's Degrees Conferred								
1989 - 1990 1990 - 1991 1991 - 1992 Average								
White	85.82%	85.18%	84.27%	85.09%				
Black	6.89%	7.15%	7.54%	7.19%				
Hispanic	3.26%	3.57%	3.79%	3.54%				
Asian	3.56%	3.65%	3.90%	3.70%				
Am Indian	0.46%	0.46%	0.50%	0.47%				

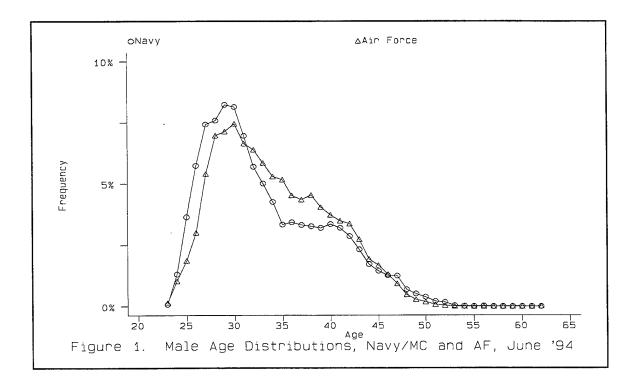
The demographic profile of the Navy/MC combined pilot population, as defined by Defense Manpower Data Center (DMDC) for June of 1994, was used as a basis for the age distribution of the matched databases. The present Navy/MC pilot age profile was selected as a stable indicator of the age distribution normally seen in the Navy/MC flying population. This distribution is a result of requiring prospective student pilots to be college graduates, as well as promotion and retention practices within the Navy (see Tables 1 and 2). Since loglinear modeling did not indicate a statistically significant difference in the race-specific age distributions, the overall age distribution was applied to each of the race categories. The three year averaged DOE race distribution was combined with the overall Navy/MC pilot age distribution to create a demographic age/race matrix from which to derive the Navy matched database (see Tables 5 and 6).

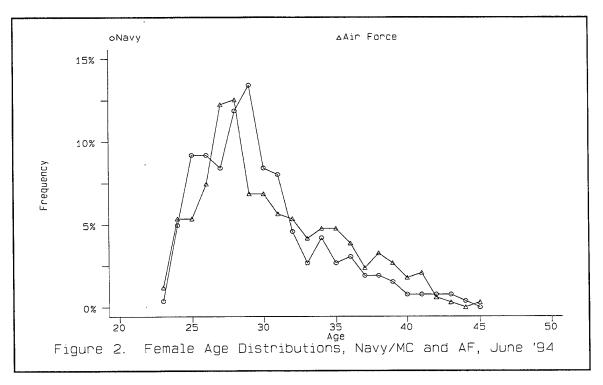
Because of recent trends to design protective clothing and equipment for tri-service use, loglinear modeling was used to compare the Navy/MC and Air Force age distributions for both male and female flying personnel (see Figures 1 and 2). Significant differences were present for the males, but not the females. The Air Force male age distribution is slightly older than that of the Navy/MC males. Since the Navy requested the database and funded the necessary research, the Navy/MC age distribution was utilized in the matching process. Considering that age is a significant component of anthropometric variation, the derived male database, in particular, should not be used to design clothing, equipment, or workstations for any eligible pilot population other than the Navy/MC without very careful consideration.

The eligible subjects were randomly selected from the male and female 1988 Anthropometric Survey of US Army Personnel (ANSUR) data pool if they were 23 years of age or older, and belonged to one of five racial groups (White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Native Alaskan). The total number of eligible males was 2,935 and the number of eligible females was 2,102. The data pool was *not* truncated on the current anthropometric standards for entrance into flight school as the goal of the database is to ensure

Table 5.	5. Estimated Demographics for Male Eligible Pilot Population						
	White	Black	Hispanic	Am Indian	Asian	Totals	
Age							
23-25	4.34%	0.26%	0.17%	0.02%	0.22%	5.01%	
26-30	32.21%	1.91%	1.25%	0.15%	1.62%	37.14%	
31-35	21.88%	1.30%	0.85%	0.10%	1.10%	25.23%	
≥ 36	28.38%	1.68%	1.10%	0.13%	1.43%	32.72%	
Totals	86.83%	5.14%	3.38%	0.41% Discrepanci	4.38% es due to errors	100% in rounding.	

Table 6.	Estimated Demographics for Female Eligible Pilot Population						
	White	Black	Hispanic	Am Indian	Asian	Totals	
Age	40.000/	4.070/	0.500/	0.070/]	
23-25	12.68%	1.07%	0.53%	0.07%	0.55%	14.90%	
26-30	43.48%	3.67%	1.81%	0.24%	1.89%	51.09%	
31-35	18.80%	1.59%	0.78%	0.10%	0.82%	22.09%	
≥ 36	10.04%	0.85%	0.42%	0.06%	0.44%	11.81%	
Totals	85.09%	7.19%	3.54%	0.47% Discrepand	3.70% ies due to error	100% s in rounding.	





that future crew stations are designed to accommodate 80% of all US females and 95% of all US males who meet the age and educational criteria for entrance into flight school.

Stratified random selection was employed to create a demographically matched anthropometric database that emulates the race distribution of current eligible pilots, as estimated by the DOE data, and the present US Navy/MC pilot age distribution (see Tables 7 and 8). A total of four male (n=738) and four female (n=582) matched databases were created and the most central database for Stature and Weight was selected (Tables 9 and 10). Match 1 was selected for both males and females.

The databases were delivered to the US Navy on magnetic media and contain all 132 anthropometric dimensions measured during ANSUR. For a detailed discussion of ANSUR and information on all of the measured dimensions, please refer to the 1988 Anthropometric Survey of US Army Personnel: Methods and Summary Statistics⁶. A carefully chosen selection of 70 dimensions from the US Navy/MC eligible pilot databases are summarized in this report. Chapter II begins with a complete description of all anthropometric landmarks used as reference points to measure the 70 summarized dimensions. The summary statistics and descriptions of the dimensions follow. The next chapter contains correlations, while Chapter IV presents bivariate tables for pairs of dimensions frequently used as key dimensions. The final chapter contains regression equations that can be used to predict critical design values from a specified pair of key dimensions.

Table 7. Demographic Distribution of Male Matched Database							
	White	Black	Hispanic	Am Indian	Asian	Totals	
Age	32	2	1	0	2	37	
23-25	4.30%	0.30%	0.10%	0.00%	0.30%	5.00%	
26-30	237	14	9	1	12	273	
	32.10%	1.90%	1.20%	0.10%	3.30%	37.10%	
31-35	161	10	6	1	8	186	
	21.80%	1.40%	0.80%	0.10%	1.10%	22.30%	
≥ 36	209	13	8	1	11	242	
	28.30%	1.80%	1.10%	0.10%	1.50%	32.60%	
Totals	639 86.60%	39 5.30%	24 3.30%	3 0.40% Discrepa	33 4.50% noies due to erro	738 100.00% ors in rounding.	

Table 8. Demographic Distribution of Female Matched Database						
	White	Black	Hispanic	Am Indian	Asian	Totals
Age						
23-25	74	6	3	12	3	86
	12.71%	1.03%	0.51%	2.06%	0.51%	14.78%
26-30	253	21	11	2	11	302
	43.47%	3.61%	1.89%	0.34%	1.89%	51.89%
31-35	110	9	5	1	5	130
0.00	18.90%	1.55%	0.86%	0.17%	0.86%	22.34%
	10.0070		0.0070			
≥ 36	58	5	2	4	3	68
- "	9.96%	0.86%	0.34%	0.68%	0.51%	11.68%
	0.0070]
Totals	495	41	21	3	22	582
. 000	85.05%	7.04%	3.61%	0.52%	3.78%	100.00%
		7.0470	0.0170		cies due to error	
L				pun		o rounding.

Table 9. Stature and Weight Summary Statistics of the Male Matched Databases								
					·			
	Mean	St Dev	Minimum	Maximum	Total N			
Match 1*								
Stature	1760.71	68.66	1497	1955	738			
Weight	625.69	115.30	529	1169	738			
Match 2								
Stature	1760.00.	67.42	1526	1954	738			
Weight	803.71	113.61	534	1169	738			
Match 3								
Stature	1762.66	68.35	1497	1954	738			
Weight	807.34	115.85	545	1214	738			
Match 4								
Stature	1760.53	67.70	1497	1954	738			
Weight	803.42	115.20	529	1169	738			

^{*}Match 1 was chosen as the US Navy/MC Male Eligible Pilot Database

Table 10. Stature and Weight Summary Statistics of the Female Matched Databases					
	Mean	St Dev	Minimum	Maximum	Total N
Match 1*					
Stature	1632.84	68.60	1428	1870	582
Weight	625.69	87.92	389	967	582
Match 2					
Stature	1632.83	64.59	1428	1870	582
Weight	623.59	90.32	389	923	582
Match 3					
Stature	1632.22	66.28	1428	1870	582
Weight	625.63	90.62	389	957	582
Match 4					
Stature	1635.84	65.84	1428	1836	582
Weight	627.13	87.83	389	967	582

^{*}Match 1 was chosen as the US Navy/MC Female Eligible Pilot Database

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CHAPTER II

SUMMARY STATISTICS

THE LANDMARKS

Dimensions are measured from one point on the body (or a fixed surface such as the floor) to another or, in the case of circumferences, around a part of the body at a specified level. To ensure that each dimension is measured accurately and consistently from subject to subject, dimensions are defined in terms of body landmarks, which serve as the origin, termination, or level of measurement of a dimension.

The landmarks used to define the measurements summarized in this report are listed and briefly described on the following pages. Detailed illustrated instructions for locating these landmarks can be found in the Measurer's Handbook: US Army Anthropometric Survey 1987-1988.

Landmark Definitions and Illustrations Abdominal point, anterior: Acromion, right and The most protruding point of left: The point of the relaxed abdomen of intersection of the lateral a seated subject. border of the acromial process and a line running down the middle of the shoulder from the neck to the tip of the shoulder. Biceps point: The highest Bustpoint, right and point of the right flexed left: The anterior points biceps as viewed from of the bra cups. the subject's right side.

Buttock point, posterior: Point of maximum protrusion of the right buttock of a standing subject.	Buttock point, lateral: right and left: Points on the thigh or hip at the level of the maximum protrusion of the right buttock.	
Calf: A point on the side of the calf at the level of the maximum circumference of the right calf.	Cervicale: The superior palpable point of the spine of the seventh cervical vertebra.	
Dactylion III, right and left: The tip of the middle finger.	Deltoid point, right and left: The lateral point of the right deltoid muscle, and the margin of the left deltoid muscle at the level of the right deltoid point.	
Dorsal juncture of the calf and thigh: The juncture between the right calf and thigh behind the knee of a subject sitting with the knee flexed 90 degrees.	Dorsal juncture of the foot and leg: The top of a skin crease between the right foot and the front of the ankle when the knees and ankles are flexed about 30 degrees.	
Ectocanthus: The outside corner of the right eye formed by the meeting of the upper and lower eyelids.	Elbow crease: The skin crease on the inside of the right elbow joint when the elbow is flexed 90 degrees.	

Gluteal furrow point: The lowest point of the lowest furrow or crease at the juncture of the right buttock and the thigh.	Infrathyroid: The inferior point in the midsagittal plane of the thyroid cartilage (Adam's apple).	
Inner thigh: A vertical line halfway between the front and back of the right inner thigh, and extending downward from the level of the gluteal furrow.	Knee point, anterior: The most protruding point of the right kneecap of a seated subject.	
Lateral malleolus: The lateral point of the right lateral malleolus (outside ankle bone).	Midpatella: The anterior point halfway between the top and bottom of the right patella (kneecap).	
Midshoulder: The point on the top of the right shoulder midway between the neck (right trapezius point) and the tip of the shoulder (acromion, right).	Midspine: A line down the center of the back.	
Neck, anterior, right lateral and left lateral: Anterior and lateral points at the base of the neck.	Olecranon, bottom and rear: The lowest and rearmost points of the right elbow with the elbow flexed 90 degrees.	

Olecranon, center: A point on the center of the curvature of the right olecranon process with the elbow flexed about 115 degrees.		Scye, anterior on torso: A short horizontal line on the torso originating at the apex of the right anterior axillary fold.	
Scye, anterior on upper arm: A short horizontal line on the upper arm originating at the apex of the right anterior axillary fold.		Scye, midscye, right and left: A short horizontal line bisecting the posterior diagonal scye landmark.	
Scye, midspine: A short, horizontal line across the spine at the level of the posterior horizontal scye landmarks.		Scye, posterior diagonal, right and left: A diagonal line connecting the apex of the posterior axillary fold with the acromion landmark on the tip of the shoulder.	
Scye, posterior horizontal, right and left: A short horizontal line on the back originating at the apex of the posterior axillary fold.	T T	Scye, posterior vertical, right and left: A short vertical line originating at the apex of the posterior axillary fold.	
Stylion: The lowest point of the bottom of the right radius.		Suprapatella: The superior point of the right patella (kneecap).	

Tenth rib: The inferior point of the right tenth rib (bottom of the rib cage).	Thelion, right and left: Center of the nipples (on males).
Thigh point, top: The highest point of the top of the right thigh of a seated subject.	Top of head: The highest point on the head when the head is in the Frankfort plane.
Trapezius point, right and left: The point at which the anterior border of the trapezius muscle crosses the lateral neck landmark.	Trochanter: A point at the center of the lateral surface of the greater trochanter of the right femur of a sitting subject.
Waist (natural indentation), right, left, anterior, and posterior: Level of the greatest indentation on the right side of the torso, or half the distance between 10th rib and Iliocristale if no single indentation is clear.	Waist (omphalion), right, left, anterior, and posterior: Level of the center of the navel.
Wrist, dorsal: A line across the back of the right wrist originating at the stylion landmark and perpendicular to the long axis of the arm.	

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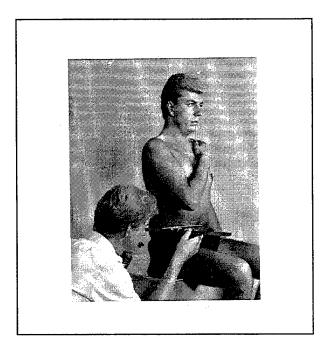
THE SUMMARY STATISTICS

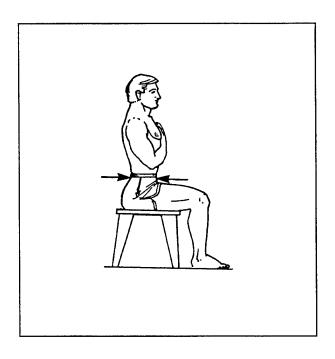
Summary statistics, including means, standard deviations, and percentile values for the male and female US Navy/MC Eligible Pilot Databases, are presented in the following pages. Each of the summarized dimensions is fully described and illustrated. All of the dimensions were directly measured using traditional instruments and standard anthropometric techniques. The measurements were taken on the right side of the subject unless otherwise specified or in the rare cases where an injury or anatomical abnormality made it necessary to measure on the left side. Measurements were made to the nearest millimeter, except Weight taken to the nearest 0.1 kilogram.

Detailed instructions for measuring these anthropometric dimensions can be found in the Measurer's Handbook: US Army Anthropometric Survey 1987-1988. Information regarding the survey in general can be found in the 1988 Anthropometric Survey of US Army Personnel: Methods and Summary Statistics. 6

(1) Abdominal Extension Depth, Sitting

The horizontal distance between the anterior point of the abdomen and the back at the same level is measured with a beam caliper. The subject sits erect looking straight ahead. The measurement is made at the maximum point of quiet respiration.



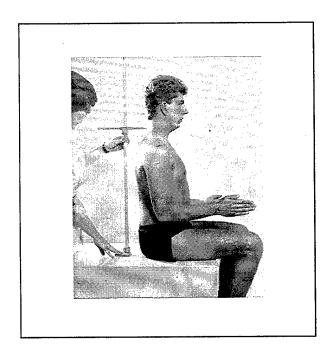


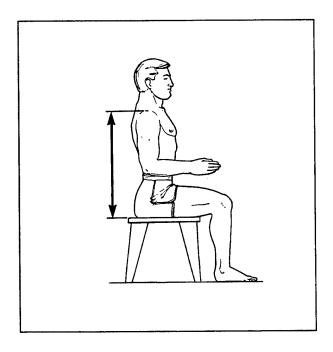
(1) Abdominal Extension Depth, Sitting

	Famalas	··· ···	l I			
Females <u>Millimeters</u>		Inches		B#:11: 4	Males	
<u>winninere</u>	ers	<u>Inches</u>		<u>Millimeters</u>		<u>Inches</u>
226.3	Mean	8.91		249.0	Mean	9.80
1.1	SE(Mean)	0.04		1.1	SE(Mean)	0.04
27.1	StDev	1.07		30.0	StDev	1.18
0.8	SE(StDev)	0.03		0.8	SE(StDev)	0.03
	, (,				0=(0.501)	0.00
170.0	Minimum	6.69		184.0	Minimum	7.24
312.0	Maximum	12.28		350.0	Maximum	13.78
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Coefficier	nt of Variation	12.0%		Coefficie	nt of Variation	12.0%
Symmetry	yVeta I	0.48		Symmeti	yVeta I	0.40
Kurtosis	Veta II	2.86		Kurtosis-	Veta II	2.92
Sam	nple Size	582		Sar	nple Size	736
ł	Percentiles				Percentiles	
Millimeter		Inches		Millimete	ers	Inches
175.9	1st	6.93		191.6	1st	7.54
179.9	2nd	7.08		196.3	2nd	7.73
182.5	3rd	7.18		199.5	3rd	7.85
186.3	5th	7.33		204.0	5th	8.03
192.8	10th	7.59		211.8	10th	8.34
197.8	15th	7.79		217.5	15th	8.56
202.0	20th	7.95		222.4	20th	8.76
205.9	25th	8.11		226.8	25th	8.93
209.5	30th	8.25		231.0	30th	9.09
213.1	35th	8.39		234.9	35th	9.25
216.5	40th	8.53		238.8	40th	9.40
220.0	45th	8.66		242.7	45th	9.55
223.6	50th	8.80		246.6	50th	9.71
227.2	55th	8.95		250.6	55th	9.87
231.0	60th	9.09		254.7	60th	10.03
235.0	65th	9.25		259.1	65th	10.20
239.3	70th	9.42		263.7	70th	10.38
244.0	75th	9.61		268.8	75th	10.58
249.4	80th	9.82		274.6	80th	10.81
255.7	85th	10.06		281.3	85th	11.07
263.6	90th	10.38		289.7	90th	11.41
274.9	95th	10.82		301.9	95th	11.88
281.9	97th	11.10		309.3	97th	12.18
286.8	98th	11.29		314.5	98th	12.38
293.6	99th	11.56]	322.0	99th	12.68

(2) Acromial Height, Sitting

The vertical distance between a sitting surface and the acromion landmark on the tip of the right shoulder is measured with an anthropometer. The subject sits erect looking straight ahead. The shoulders and upper arms are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The measurement is made at the maximum point of quiet respiration.





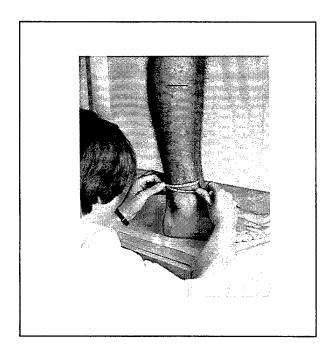
(2) Acromial Height, Sitting

Females			
Millimete	<u>Inches</u>		
565.3	Mean	22.25	
1.1	SE(Mean)	0.04	
26.2	StDev	1.03	
0.8	SE(StDev)	0.03	
490.0	Minimum	19.29	
664.0	Maximum	26.14	
l .	nt of Variation	4.6%	
Symmetry		0.08	
Kurtosis	Veta II	3.04	
Sam	ple Size	582	
	Percentiles		
Millimeter		Inches	
502.5	1st	19.78	
511.1	2nd	20.12	
516.2	3rd	20.32	
522.8	5th	20.58	
532.5	10th	20.96	
538.7	15th	21.21	
543.6	20th	21.40	
547.8	25th	21.57	
551.5	30th	21.71	
555.0	35th	21.85	
558.3	40th	21.98	
561.6	45th	22.11	
564.8	50th	22.24	
568.0	55th	22.36	
571.4	60th	22.49	
574.8	65th	22.63	
578.5	70th	22.78	
582.5	75th	22.93	
587.0	80th	23.11	
592.3	85th	23.32	
599.0	90th	23.58	
608.7	95th	23.97	
614.9	97th	24.21	
619.3	98th	24.38	
625.9	99th	24.64	

Males			
Millimete	<u>rs</u>	<u>Inches</u>	
607.6	Mean	23.92	
1.0	SE(Mean)	0.04	
28.1	StDev	1.10	
0.7	SE(StDev)	0.03	
	(* * * *)		
518.0	Minimum	20.39	
701.0	Maximum	27.60	
Coefficien	nt of Variation	4.6%	
	/Veta I	0.03	
Kurtosis	Veta II	2.90	
l tuitooio	7014 11	2.00	
Sam	ple Size	736	
	Percentiles		
Millimeter	S	Inches	
545.3	1st	21.47	
551.6	2nd	21.71	
555.7	3rd	21.88	
561.6	5th	22.11	
571.1	10th	22.48	
577.7	15th	22.75	
583.1	20th	22.96	
587.9	25th	23.14	
592.2	30th	23.31	
596.2	35th	23.47	
600.0	40th	23.62	
603.7	45th	23.77	
607.4	50th	23.91	
611.1	55th	24.06	
614.8	60th	24.20	
618.6	65th	24.36	
622.7	70th	24.51	
627.0	75th	24.69	
631.8	80th	24.87	
637.3	85th	25.09	
644.0	90th	25.36	
653.6	95th	25.73	
659.5	97th	25.96	
663.5	98th	26.12	
669.6	99th	26.36	

(3) Ankle Circumference

The minimum horizontal circumference of the right ankle is measured with a tape. The subject stands with the feet about 10 cm apart and the weight distributed equally on both feet.





(3) Ankle Circumference

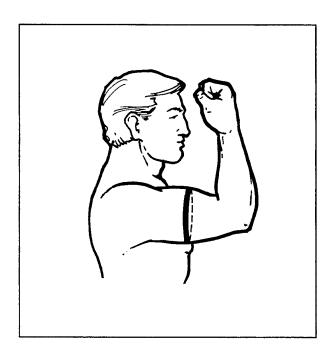
Females			
Millimete	<u>Millimeters</u>		
207.1	Mean	8.15	
0.5	SE(Mean)	0.02	
12.3	StDev	0.48	
0.4	SE(StDev)	0.01	
173.0	Minimum	6.81	
261.0	Maximum	10.28	
Coefficien	t of Variation	5.9%	
Symmetry	/Veta I	0.34	
Kurtosis	Veta II	3.40	
Sam	ple Size	580	
	Percentiles		
Millimeter		Inches	
181.3	1st	7.14	
184.1	2nd	7.25	
185.9	3rd	7.32	
188.3	5th	7.41	
192.1	10th	7.56	
194.7	15th	7.67	
196.8	20th	7.75	
198.7	25th	7.82	
200.3	30th	7.89	
201.9	35th	7.95	
203.5	40th	8.01	
205.0	45th	8.07	
206.5	50th	8.13	
208.0	55th	8.19	
209.6	60th	8.25	
211.2	65th	8.32	
213.0 215.0	70th 75th	8.39	
217.2	75th 80th	8.46 8.55	
217.2	85th	6.55 8.65	
219.6	90th	8.79	
223.2	95th	8.99	
232.0	95th 97th	9.13	
234.6	98th	9.13 9.23	
238.7	99th	9.40	

	Males	
Millimeter		<u>Inches</u>
222.4	Mean	8.76
0.5	SE(Mean)	0.02
13.5	StDev	0.53
0.4	SE(StDev)	0.01
180.0	Minimum	7.09
267.0	Maximum	10.51
Coefficient	of Variation	6.1%
Symmetry-	Veta I	0.22
Kurtosis		2.79
Samp	ole Size	733
	Percentiles	
Millimeters		Inches
196.1	1st	7.72
197.7	2nd	7.78
199.0	3rd	7.84
201.1	5th	7.92
204.9	10th	8.07
207.9	15th	8.18
210.3	20th	8.28
212.5	25th	8.37
214.5	30th	8.45
216.4	35th	8.52
218.3	40th	8.59
220.1	45th	8.66
221.9	50th	8.74
223.7	55th	8.81
225.5	60th	8.88
227.4	65th	8.95
229.4	70th	9.03
231.6	75th	9.12
234.0	80th	9.21
236.8	85th	9.32
240.3	90th	9.46
245.4	95th	9.66
248.7	97th	9.79
251.0	98th	9.88
254.8	99th	10.03

(4) Biceps Circumference, Flexed

The circumference of the right upper arm around the flexed biceps muscle is measured with a tape held perpendicular to the long axis of the upper arm. The subject stands with the upper arm extended horizontally and the elbow flexed 90 degrees. The fist is clenched and held facing the head, and the subject exerts maximum effort in "making a muscle."





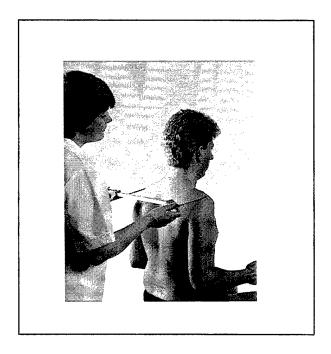
(4) Biceps Circumference, Flexed

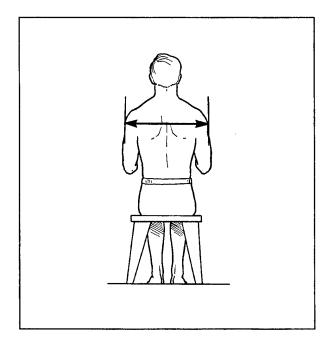
Females			
Millimete	<u>Inches</u>		
281.5	Mean	11.08	
1.0	SE(Mean)	0.04	
23.2	StDev	0.04	
0.7	SE(StDev)	0.03	
0.,	02(0.507)	0.00	
225.0	Minimum	8.86	
355.0	Maximum	13.98	
Coefficier	nt of Variation	0.20/	
Symmoth	. Voto I	0.2%	
Kurtosis	/Veta I	3.01	
Kui tosis	vela ii	3.01	
Sam	ple Size	582	
	Percentiles		
Millimeter	S	inches	
229.3	1st	9.03	
237.0	2nd	9.33	
241.2	3rd	9.50	
246.4	5th	9.70	
253.6	10th	9.99	
258.3	15th	10.17	
261.9	20th	10.31	
265.2	25th	10.44	
268.2	30th	10.56	
271.0	35th	10.67	
273.8	40th	10.78	
276.6	45th	10.89	
279.4	50th	11.00	
282.4	55th	11.12	
285.4	60th	11.24	
288.7	65th	11.37	
292.3	70th	11.51	
296.3	75th	11.66	
300.8	80th	11.84	
306.2	85th	12.06	
313.1	90th	12.33	
323.2	95th	12.72	
329.3	97th	12.96	
333.5	98th	13.13	
339.2	99th	13.36	

Males			
<u>Millimete</u>	<u>Millimeters</u>		
337.2	Mean	13.27	
1.0	SE(Mean)	0.04	
26.7	StDev	1.05	
0.7	SE(StDev)	0.03	
268.0	Minimum	10.55	
439.0	Maximum	17.28	
1	t of Variation	7.9%	
Symmetry		0.21	
Kurtosis	Veta II	3.22	
Sam	ple Size	738	
	Percentiles		
Millimeter		Inches	
273.9	1st	10.78	
282.6	2nd	11.12	
287.7	3rd	11.33	
294.4	5th	11.59	
304.1	10th	11.97	
310.3	15th	12.22	
315.2	20th	12.41	
319.4	25th	12.57	
323.1	30th	12.72	
326.5	35th	12.86	
329.8	40th	12.98	
333.0	45th	13.11	
336.2	50th	13.24	
339.4	55th	13.36	
342.7	60th	13.49	
346.2	65th	13.63	
349.8	70th	13.77	
353.9	75th	13.93	
358.6	80th	14.12	
364.1	85th	14.33	
371.2	90th	14.61	
382.2	95th	15.05	
389.5	97th	15.34	
395.0	98th	15.55	
403.9	99th	15.90	

(5) Bideltoid Breadth

The maximum horizontal distance between the lateral margins of the upper arms on the deltoid muscles is measured with a beam caliper. The subject sits erect looking straight ahead. The shoulders and upper arms are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The measurement is made at the maximum point of quiet respiration.





(5) Bideltoid Breadth

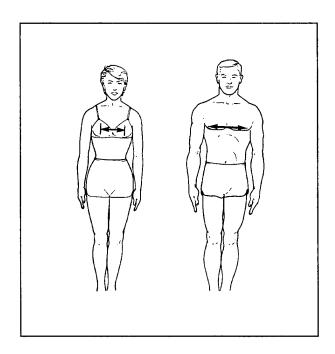
Females				
Millimeters		<u>Inches</u>		
432.7	Mean	17.03		
0.9	SE(Mean)	0.04		
22.5	StDev	0.88		
0.7	SE(StDev)	0.03		
358.0	Minimum	14.09		
501.0	Maximum	19.72		
Coefficien	Coefficient of Variation			
Symmetry	Veta I	0.07		
KurtosisVeta II		3.34		
Sample Size		582		
	Percentiles			
Millimeters	\$	Inches		
376.8	1st	14.84		
385.2	2nd	15.17		
390.1	3rd	15.36		
396.3	5th	15.60		
405.0	10th	15.95		
410.5	15th	16.16		
414.7	20th	16.33		
418.3	25th	16.47		
421.4	30th	16.59		
424.3	35th	16.70		
427.0	40th	16.81		
429.6	4 5th	16.91		
432.3	50th	17.02		
434.9	55th	17.12		
437.6	60th	17.23		
440.5	65th	17.34		
443.5	70th	17.46		
446.9	75th	17.59		
450.8	80th	17.75		
455.4	85th	17.93		
461.5	90th	18.17		
471.0	95th	18.54		
477.5	97th	18.80		
482.5	98th	19.00		
490.6	99th	19.32		

Males				
<u>Millimeters</u>		<u>Inches</u>		
494.3	Mean	19.46		
1.0	SE(Mean)	0.04		
27.0	StDev	1.06		
0.7	SE(StDev)	0.03		
420.0	Minimum	16.54		
593.0	Maximum	23.35		
Coefficient of Variation		5.5%		
Symmetry-	Veta I	0.07		
KurtosisVeta II		2.96		
Samp	le Size	736		
	Percentiles			
Millimeters		Inches		
431.9	1st	17.00		
439.1	2nd	17.29		
443.7	3rd	17.47		
450.0	5th	17.72		
459.7	10th	18.10		
466.2	15th	18.36		
471.4	20th	18.56		
475.9	25th	18.74		
480.0	30th	18.90		
483.7	35th	19.04		
487.3	40th	19.18		
490.7	45th	19.32		
494.1	50th	19.45		
497.6	55th	19.59		
501.0	60th	19.73		
504.6	65th	19.87		
508.4	70th	20.01		
512.4	75th	20.18		
517.0	80th	20.35		
522.3	85th	20.56		
528.9	90th	20.82		
538.6	95th	21.21		
544.9	97th	21.45		
549.4	98th	21.63		
556.4	99th	21.91		

(6) Bustpoint/Thelion-Bustpoint/Thelion Breadth

The distance between the right and left bustpoint landmarks on women and the center of the nipples (thelion) on men is measured with a beam caliper. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed. The measurement is made at the maximum point of quiet respiration.





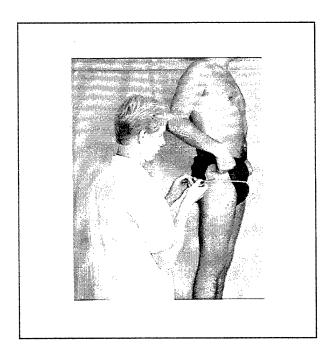
(6) Bustpoint/Thelion-Bustpoint/Thelion Breadth

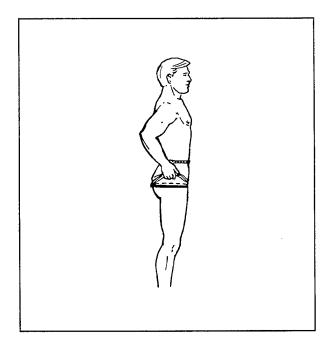
Females				
<u>Millimeters</u>		<u>Inches</u>		
183.7	Mean	7.23		
0.7	SE(Mean)	0.03		
17.0	StDev	0.67		
0.5	SE(StDev)	0.02		
128.0	Minimum	5.04		
232.0	Maximum	9.13		
Coefficier	nt of Variation	9.2%		
Symmetry	/Veta I Veta II	-0.01		
Kurtosis	Veta II	2.91		
Sample Size		582		
	Percentiles			
Millimeter		Inches		
145.0	1st	5.71		
149.2	2nd	5.87		
151.9	3rd	5.98		
155.7	5th	6.13		
161.8	10th	6.37		
166.0	15th	6.54		
169.3	20th	6.67		
172.2	25th	6.78		
174.8	30th	6.88		
177.2	35th	6.98		
179.5 181.6	40th	7.07		
183.8	45th 50th	7.15 7.24		
185.9	55th	7.24		
188.1	60th	7.32 7.41		
190.3	65th	7.41 7.49		
190.3	70th	7.49 7.59		
192.7	75th	7.59 7.69		
193.2	80th	7.80		
201.3	85th	7.00 7.92		
205.4	90th	8.09		
211.6	95th	8.33		
215.7	97th	8.49		
218.7	98th	8.61		
223.6	99th	8.81		

Males				
Millimeters		<u>Inches</u>		
221.6	Mean	8.73		
0.7	SE(Mean)	0.03		
19.4	StDev	0.76		
0.5	SE(StDev)	0.02		
167.0	Minimum	6.57		
283.0	Maximum	11.14		
Coefficien	t of Variation	8.8%		
	/Veta I	0.11		
Kurtosis	KurtosisVeta II			
Sample Size		738		
	Percentiles			
Millimeter		Inches		
177.1	1st	6.97		
182.7	2nd	7.19		
186.1	3rd	7.33		
190.5	5th	7.50		
197.1	10th	7.76		
201.6	15th	7.94		
205.1	20th	8.07		
208.2	25th	8.20		
210.9	30th	8.30		
213.5	35th	8.41		
216.0	40th	8.51		
218.5	45th	8.60		
220.9	50th	8.70		
223.4	55th	8.80		
226.0	60th	8.90		
228.7	65th	9.00		
231.5	70th	9.12		
234.7	75th	9.24		
238.2 242.3	80th	9.38		
242.3	85th 90th	9.54 0.75		
255.3	90th 95th	9.75 10.05		
260.2	95th 97th	10.05 10.24		
263.6	97th 98th	10.24		
268.8	99th	10.58		
200.0	ฮฮแเ	10.56		

(7) Buttock Circumference

The horizontal circumference of the trunk at the level of the maximum protrusion of the right buttock is measured with a tape. The subject stands erect with the heels together and the weight equally distributed on both feet.





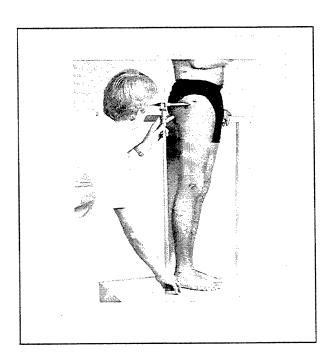
(7) Buttock Circumference

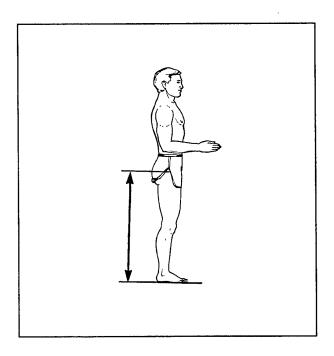
Females		
<u>Millimeters</u>		Inches
974.5	Mean	38.36
2.6	SE(Mean)	0.10
62.4	StDev	2.46
1.8	SE(StDev)	0.07
783.0	Minimum	30.83
1167.0	Maximum	45.94
Coefficien	t of Variation	6.4%
Symmetry	Veta I	0.23
Kurtosis	-Veta II	3.06
Sam	ple Size	582
	Percentiles	
Millimeters	3	Inches
839.8	1st	33.06
855.4	2nd	33.68
865.0	3rd	34.06
877.8	5th	34.56
897.5	10th	35.33
910.9	15th	35.86
921.7	20th	36.29
931.2	25th	36.66
939.8	30th	37.00
947.9	35th	37.32
955.8	40th	37.63
963.5	45th	37.93
971.3	50th	38.24
979.2	55th	38.55
987.4	60th	38.87
996.0	65th	39.21
1005.1	70th	39.57
1015.2	75th	39.97
1026.7	80th	40.42
1040.1	85th	40.95
1057.4	90th	41.63 42.64
1083.0	95th	
1099.6 1111.6	97th	43.29 43.76
1129.9	98th 99th	43.76 44.48
1129.9	ฮฮแเ	44.40

Males		
Millimeter		<u>Inches</u>
995.0	Mean	39.17
2.3	SE(Mean)	0.09
62.1	StDev	2.44
1.6	SE(StDev)	0.06
	, ,	
	Minimum	32.32
1239.0	Maximum	48.78
Coefficient	of Variation	6.2%
Symmetry-		0.2%
Kurtosis		2.99
Kui (0515	-vela II	2.99
Samp	ole Size	738
	Percentiles	
Millimeters		Inches
854.6	1st	33.64
872.4	2nd	34.35
883.1	3rd	34.77
897.1	5th	35.32
918.0	10th	36.14
931.9	15th	36.69
942.9	20th	37.12
952.6	25th	37.50
961.3	30th	37.85
969.5	35th	38.17
977.3	40th	38.48
985.1	45th	38.78
992.8	50th	39.09
1000.6	55th	39.40
1008.7	60th	39.71
1017.1	65th	40.04
1026.1	70th	40.40
1036.0	75th	40.79
1047.1	80th	41.22
1060.1	85th	41.74
1076.5	90th	42.38
1100.6	95th	43.33
1115.7	97th	43.92
1126.3	98th	44.34
1142.1	99th	44.96

(8) Buttock Height

The vertical distance between a standing surface and the level of the maximum protrusion of the right buttock is measured with an anthropometer at the right side of the thigh. The subject stands erect with the heels together and the weight distributed equally on both feet.



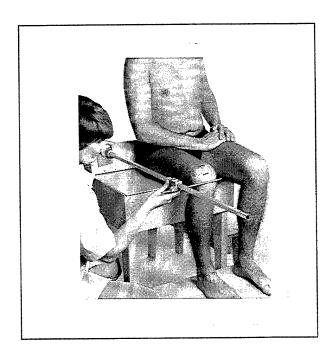


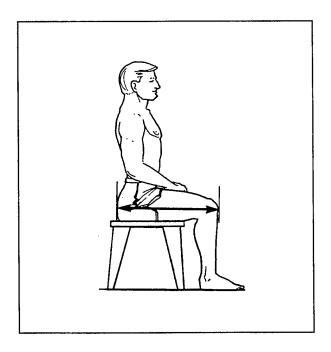
(8) Buttock Height

	Males	
<u>Millimeters</u>		<u>Inches</u>
883.7	Mean	34.79
1.7	SE(Mean)	0.07
45.2	StDev	1.78
1.2	SE(StDev)	0.05
· -	Minimum	28.15
1033.0	Maximum	40.67
Coefficient	of Variation	5.1%
Symmetry-	Veta I	0.10
Kurtosis	Veta II	3.06
Samp	le Size	738
	Percentiles	
Millimeters		Inches
777.8	1st	30.62
794.0	2nd	31.26
802.9	3rd	31.61
813.9	5th	32.04
829.1	10th	32.64
838.7	15th	33.02
846.2	20th	33.31
852.8	25th	33.57
858.7	30th	33.81
864.4	35th	34.03
869.9	40th	34.25
875.4	45th	34.47
881.0	50th	34.69
886.7	55th	34.91
892.7	60th	35.15
899.0	65th	35.39
905.8	70th	35.66
913.4	75th	35.96
922.0	80th	36.30
932.0	85th	36.69
944.6	90th	37.19
962.5	95th	37.89
973.0	97th	38.31
979.8	98th	38.58
988.6	99th	38.92

(9) Buttock-Knee Length

The horizontal distance between a buttock plate placed at the most posterior point on either buttock and the anterior point of the right knee is measured with an anthropometer. The subject sits erect. The thighs are parallel and the knees flexed 90 degrees with the feet in line with the thighs.





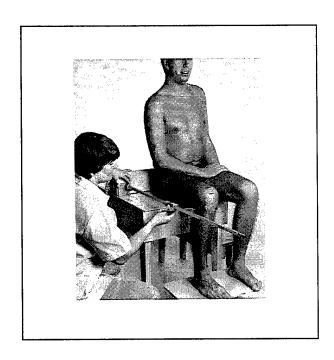
(9) Buttock-Knee Length

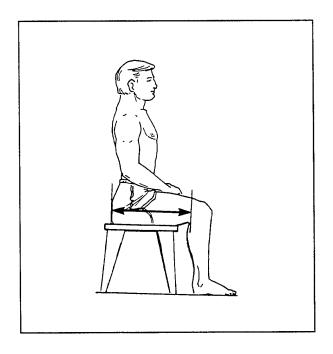
Females		
<u>Millimeters</u>		<u>Inches</u>
583.3	Mean	22.96
1.3	SE(Mean)	0.05
30.3	StDev	1.19
0.9	SE(StDev)	0.03
479.0	Minimum	18.86
687.0	Maximum	27.05
Coefficient	of Variation	5.2%
Symmetry-		0.08
Kurtosis	-Veta II	3.18
Samp	ole Size	582
	Percentiles	
Millimeters		Inches
511.6	1st	20.14
521.9	2nd	20.55
527.8	3rd	20.78
535.4	5th	21.08
546.2	10th	21.50
553.2	15th	21.78
558.6	20th	21.99
563.2	25th	22.17
567.4	30th	22.34
571.4	35th	22.49
575.1	40th	22.64
578.8	45 th	22.79
582.5	50th	22.93
586.2	55th	23.08
590.1	60th	23.23
594.1	65th	23.39
598.4	70th	23.56
603.1	75th	23.74
608.5	80th	23.96
614.7	85th	24.20
622.6	90th	24.51
634.0	95th	24.96
641.1	97th	25.24
646.1	98th	25.44
653.2	99th	25.71

	Males	
Millimeter	<u>s</u>	<u>Inches</u>
614.6	Mean	24.20
1.1	SE(Mean)	0.04
30.2	StDev	1.19
0.8	SE(StDev)	0.03
506.0	Minimum	19.92
693.0	Maximum	27.28
	of Variation	4.9%
Symmetry-		0.03
Kurtosis	-Veta II	2.83
Samp	le Size	736
	Percentiles	
Millimeters		Inches
546.1	1st	21.50
554.3	2nd	21.82
559.3	3rd	22.02
566.0	5th	22.28
576.2	10th	22.69
583.2	15th	22.96
588.7	20th	23.18
593.6	25th	23.37
598.0	30th	23.54
602.1	35th	23.70
606.1	40th	23.86
609.9	45th	24.01
613.8	50th	24.17
617.8	55th	24.32
621.8	60th	24.48
626.0	65th	24.65
630.4	70th	24.82
635.3	75th	25.01
640.8	80th	25.23
647.1	85th	25.47
655.0	90th	25.79
666.3	95th	26.23
673.3	97th	26.51
678.2	98th	26.70
685.2	99th	26.98

(10) Buttock-Popliteal Length

The horizontal distance between a buttock plate placed at the most posterior point on either buttock and the back of the right knee (the popliteal fossa at the dorsal juncture of the calf and thigh) is measured with an anthropometer. The subject sits erect. The thighs are parallel and the knees flexed 90 degrees with the feet in line with the thighs.





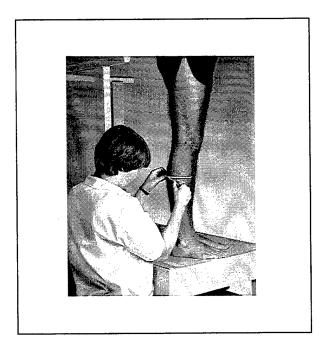
(10) Buttock-Popliteal Length

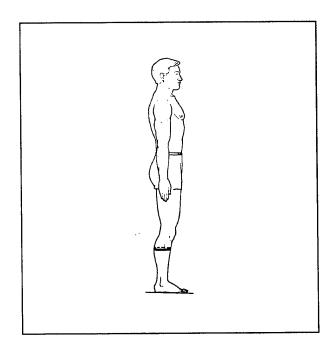
Females		
<u>Millimeters</u>		<u>Inches</u>
476.9	Mean	18.78
1.1	SE(Mean)	0.04
27.4	StDev	1.08
0.8	SE(StDev)	0.03
394.0	Minimum	15.51
578.0	Maximum	22.76
Coefficient	of Variation	5.8%
Symmetry-	Veta I	0.09
Kurtosis	-Veta II	3.19
Samp	ole Size	582
	Percentiles	
Millimeters		Inches
411.4	1st	16.19
420.5	2nd	16.55
425.8	3rd	16.77
432.7	5th	17.04
442.6	10th	17.43
449.1	15th	17.68
454.1	20th	17.88
458.5	25th	18.05
462.4	30th	18.20
466.0	35th	18.35
469.5	40th	18.48
472.9	45th	18.62
476.3	50th	18.75
479.7	55th	18.89
483.2	60th	19.02
486.9	65th	19.17
490.8	70th	19.32
495.1	75th	19.49
500.0	80th	19.68
505.6	85th	19.91
512.7	90th	20.19
523.1	95th	20.59
529.6	97th	20.85
534.1	98th	21.03
540.7	99th	21.29

	Malaa	
Males <u>Millimeters</u>		<u>Inches</u>
498.3	Mean	19.62
1.0	SE(Mean)	0.04
27.2	StDev	1.07
0.7	SE(StDev)	0.03
401.0	Minimum	15.79
570.0	Maximum	22.44
Coefficien	t of Variation	5.5%
	Veta I	-0.03
Kurtosis		2.94
Sam	ple Size	736
	Percentiles	
Millimeters	3	Inches
436.1	1st	17.17
443.8	2nd	17.47
448.5	3rd	17.66
454.7	5th	17.90
464.0	10th	18.27
470.3	15th	18.51
475.3	20th	18.71
479.6	25th	18.88
483.6	30th	19.04
487.3	35th	19.19
490.9	40th	19.33
494.4	45th	19.46
497.9	50th	19.60
501.4	55th	19.74
505.0	60th	19.88
508.7	65th	20.03
512.7	70th	20.19
517.0	75th	20.36
521.9	80th	20.55
527.5	85th	20.77
534.5 544.4	90th	21.04
	95th	21.43
550.4 554.5	97th	21.67
560.3	98th 99th	21.83 22.06
300.3	ฮฮแเ	22.00

(11) Calf Circumference

The maximum horizontal circumference of the right calf is measured with a tape. The subject stands erect with the heels approximately 10 cm apart and the weight distributed equally on both feet.





(11) Calf Circumference

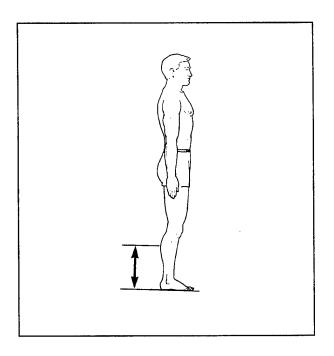
	Females	
Millimeters		Inches
354.6	Mean	13.96
1.0	SE(Mean)	0.04
23.6	StDev	0.93
0.7	SE(StDev)	0.03
291.0	Minimum	11.46
459.0	Maximum	18.07
Coefficien	t of Variation	6.6%
1	Veta I	
Kurtosis		3.20
Nuitosis	-vela II	3.20
Sam	ple Size	580
	Percentiles	
Millimeters	5	Inches
303.7	1st	11.96
308.8	2nd	12.16
312.2	3rd	12.29
316.9	5th	12.48
324.6	10th	12.78
330.0	15th	12.99
334.3	20th	13.16
338.1	25th	13.31
341.6	30th	13.45
344.8	35th	13.58
347.9	40th	13.70
350.9	45th	13.82
353.9	50th	13.93
357.0	55th	14.05
360.0	60th	14.17
363.2	65th	14.30
366.6	70th	14.43
370.3	75th	14.58
374.4	80th	14.74
379.2	85th	14.93
385.3	90th	15.17
394.4	95th	15.53
400.4	97th	15.76
404.8	98th	15.94
411.7	99th	16.21

	Males	
Millimeters		<u>Inches</u>
382.4	Mean	15.06
1.0	SE(Mean)	0.04
25.9	StDev	1.02
0.7	SE(StDev)	0.03
307.0	Minimum	12.09
461.0	Maximum	18.15
Coefficier	it of Variation	6.8%
Symmetry	/Veta I	0.04
Kurtosis	Veta II	2.86
Sam	ple Size	733
	Percentiles	
Millimeter	S	Inches
321.8	1st	12.67
329.2	2nd	12.96
333.8	3rd	13.14
340.0	5th	13.38
349.3	10th	13.75
355.5	15th	14.00
360.5	20th	14.19
364.8	25th	14.36
368.7	30th	14.51
372.2	35th	14.65
375.6	40th	14.79
379.0	45th	14.92
382.3	50th	15.05
385.6	55th	15.18
388.9	60th	15.31
392.4	65th	15.45
396.1	70th	15.60
400.2	75th	15.75
404.7	80th	15.93
409.9	85th	16.14
416.4	90th	16.40
426.0	95th	16.77
432.1 436.4	97th	17.01 17.18
430.4	98th 99th	
442.9	ษษเท	17.44

(12) Calf Height

The vertical distance between a standing surface and the level of the maximum circumference of the right calf is measured with an anthropometer. The subject stands erect with the heels together and the weight distributed equally on both feet.





(12) Calf Height

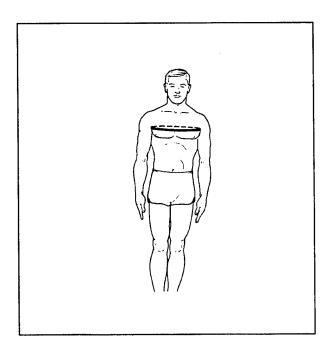
Females		
<u>Millimeters</u>		<u>Inches</u>
307.6	Mean	12.11
1.0	SE(Mean)	0.04
23.2	StDev	0.91
0.7	SE(StDev)	0.03
236.0	Minimum	9.29
397.0	Maximum	15.63
Coefficient	t of Variation	7.6%
Symmetry	Veta I	0.41
Kurtosis	-Veta II	3.62
Sam	ole Size	580
	Percentiles	
Millimeters	5	Inches
258.6	1st	10.18
263.8	2nd	10.39
267.2	3rd	10.52
271.9	5th	10.71
279.3	10th	11.00
284.4	15th	11.20
288.4	20th	11.36
291.9	25th	11.49
295.1	30th	11.62
298.1	35th	11.74
300.9	40th	11.85
303.7	45th	11.95
306.4	50th	12.06
309.2	55th	12.17
312.0	60th	12.28
315.0	65th	12.40
318.2	70th	12.53
321.8	75th	12.67
325.8	80th	12.83
330.7	85th	13.02
337.1	90th	13.27
347.4	95th	13.68
354.6	97th	13.96
360.2	98th	14.18
369.7	99th	14.56

<u>Millimeter</u>	Males <u>s</u>	<u>Inches</u>
349.0	Mean	13.74
0.8	SE(Mean)	0.03
22.2	StDev	0.87
0.6	SE(StDev)	0.02
271.0	Minimum	10.67
428.0	Maximum	16.85
	of Variation	6.4%
	Veta I	0.07
Kurtosis	-Veta II	2.99
Samp	ole Size	733
	Percentiles	
Millimeters		Inches
300.2	1st	11.82
304.8	2nd	12.00
308.0	3rd	12.12
312.6	5th	12.31
320.2	10th	12.61
325.6	15th	12.82
329.9	20th	12.99
333.7	25th	13.14
337.1	30th	13.27
340.2	35th	13.39
343.2	40th	13.51
346.1	45th	13.63
348.9	50th	13.74
351.8 354.6	55th	13.85
1	60th	13.96
357.6 360.7	65th	14.08
364.1	70th 75th	14.20 14.33
367.8	75th 80th	14.33
372.2	85th	14.46
377.7	90th	14.87
386.1	95th	15.20
391.8	97th	15.42
396.0	98th	15.42
403.1	99th	15.87
100.1	OULI	10.07

(13) Chest Circumference

The maximum horizontal circumference of the chest at the fullest part of the breast is measured with a tape. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.





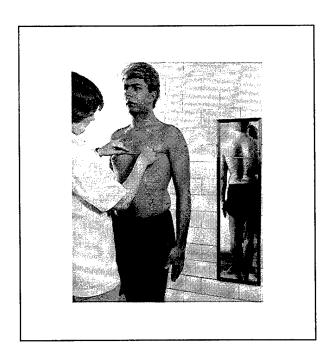
(13) Chest Circumference

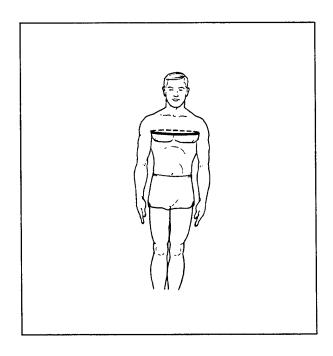
	Females	
Females <u>Millimeters</u>		Inches
	_	
912.7	Mean	35.93
2.7	SE(Mean)	0.11
66.1	StDev	2.60
1.9	SE(StDev)	0.08
715.0	Minimum	28.15
1159.0	Maximum	45.63
	of Variation	
SymmetryVeta I		0.34
KurtosisVeta II		3.29
Samp	ole Size	582
	Percentiles	
Millimeters		Inches
764.4	1st	30.10
785.6	2nd	30.93
797.6	3rd	31.40
812.6	5th	31.99
833.9	10th	32.83
847.6	15th	33.37
858.3	20th	33.79
867.7	25th	34.16
876.2	30th	34.50
884.3	35th	34.82
892.2	40th	35.13
900.0	45th	35.43
907.9	50th	35.74
916.0	55th	36.06
924.5	60th	36.40
933.5	65th	36.75
943.2	70th	37.13
954.0 966.4	75th 80th	37.56
981.2	80th 85th	38.05
1000.2	85tn 90th	38.63 39.38
1000.2	90th 95th	39.36 40.50
1026.7	97th	40.50
1040.8	97th	41.72
1039.7	99th	42.47
1070.8	ອອເກ	42.41

Males		
Millimeter	<u>'S</u>	<u>Inches</u>
1011.8	Mean	39.83
2.7	SE(Mean)	0.10
72.2	StDev	2.84
1.9	SE(StDev)	0.07
811.0	Minimum	31.93
1281.0	Maximum	50.43
Coefficient	t of Variation	7.1%
SymmetryVeta I		0.21
Kurtosis		3.03
Sam	ole Size	738
	Percentiles	
Millimeters	3	Inches
855.6	1st	33.68
871.7	2nd	34.32
882.2	3rd	34.73
896.9	5th	35.31
920.4	10th	36.24
936.8	15th	36.88
950.0	20th	37.40
961.6	25th	37.86
972.1	30th	38.27
982.0	35th	38.66
991.4	40th	39.03
1000.6	45th	39.39
1009.8	50th	39.76
1019.1	55th	40.12
1028.4	60th	40.49
1038.2	65th	40.87
1048.6	70th	41.28
1059.8	75th	41.72
1072.4	80th	42.22
1087.0	85th	42.79
1105.3	90th	43.52
1132.3	95th	44.58
1149.4	97th	45.25
1161.8	98th	45.74
1180.8	99th	46.49

(14) Chest Circumference at Scye

The horizontal circumference of the chest at the level of the scye-at-midspine landmark is measured with a tape. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.





(14) Chest Circumference at Scye

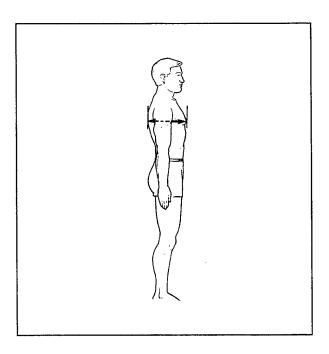
Females		
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>
889.4	Mean	35.02
2.3	SE(Mean)	0.09
54.8	StDev	2.16
1.6	SE(StDev)	0.06
748.0	Minimum	29.45
1121.0	Maximum	44.13
Coefficient of Variation		6.2%
		0.42
SymmetryVeta I KurtosisVeta II		3.62
Sample Size		582
	Percentiles	
Millimeters		Inches
770.4	1st	30.33
784.9	2nd	30.90
793.7	3rd	31.25
805.3	5th	31.70
822.6	10th	32.39
834.2	15th	32.84
843.4	20th	33.21
851.5	25th	33.52
858.9	30th	33.81
865.8	35th	34.09
872.5	40th	34.35
879.0	45th	34.61
885.7	50th	34.87
892.4	55th	35.14
899.4	60th	35.41
906.8	65th	35.70
914.7	70th	36.01
923.5	75th	36.36
933.6	80th	36.76
945.6	85th	37.23
961.2	90th	37.84
985.1	95th	38.78
1001.0	97th	39.41
1012.8	98th	39.87
1031.4	99th	40.61

	Males	
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>
1037.7	Mean	40.85
2.5	SE(Mean)	0.10
66.8	StDev	2.63
1.7	SE(StDev)	0.07
	, ,	
840.0	Minimum	33.07
1298.0	Maximum	51.10
Coefficien	t of Variation	6.4%
Coefficient of Variation SymmetryVeta I		0.4%
Kurtosis		3.10
Nuitosis	-vela II	3.10
Sam	ple Size	738
	Percentiles	
Millimeters		Inches
890.8	1st	35.07
905.6	2nd	35.65
915.4	3rd	36.04
929.3	5th	36.59
951.6	10th	37.46
967.2	15th	38.08
979.8	20th	38.58
990.9	25th	39.01
1001.0	30th	39.41
1010.3	35th	39.78
1019.3	40th	40.13
1027.9	45th	40.47
1036.6	50th	40.81
1045.2	55th	41.15
1054.0	60th	41.50
1063.1	65th	41.85
1072.6	70th	42.23
1082.9	75th	42.63
1094.3	80th	43.08
1107.4	85th	43.60
1123.8	90th	44.24
1147.3	95th	45.17
1162.0	97th	45.75 46.46
1172.4	98th	46.16
1188.2	99th	46.78

(15) Chest Depth

The horizontal distance between the chest, at the level of the right bustpoint on women or the nipple on men, and the back at the same level is measured with a beam caliper. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.





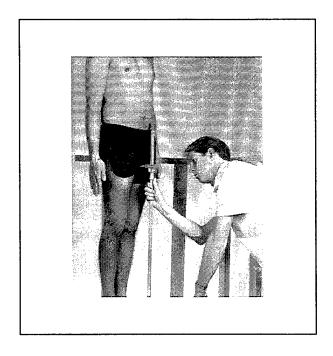
(15) Chest Depth

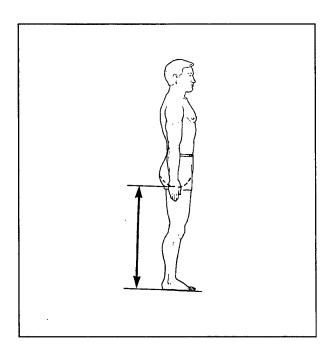
Females		
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>
240.8	Mean	9.48
0.9	SE(Mean)	0.04
22.4	StDev	0.88
0.7	SE(StDev)	0.03
174.0	Minimum	6.85
321.0	Maximum	12.64
Coefficient	t of Variation	9.3%
SymmetryVeta I		0.32
SymmetryVeta I KurtosisVeta II		3.22
Sam	ole Size	582
	Percentiles	
Millimeters	3	Inches
189.5	1st	7.46
197.5	2nd	7.78
201.9	3rd	7.95
207.3	5th	8.16
214.4	10th	8.44
218.9	15th	8.62
222.4	20th	8.76
225.5	25th	8.88
228.3	30th	8.99
231.0	35th	9.09
233.6	40th	9.20
236.2	45th	9.30
238.8	50th	9.40
241.6	55th	9.51
244.5	60th	9.63
247.6	65th	9.75
251.0	70th	9.88
254.7	75th	10.03
259.1	80th	10.20
264.3	85th	10.40
270.9	90th	10.67
280.8	95th	11.05
286.9	97th	11.29
291.1	98th	11.46
297.0	99th	11.69

Males		
Millimeter		<u>Inches</u>
249.7	Mean	9.83
0.8	SE(Mean)	0.03
22.4	StDev	0.88
0.6	SE(StDev)	0.02
188.0	Minimum	7.40
322.0	Maximum	12.68
Coefficien	t of Variation	9.0%
Symmetry	Veta I	0.10
Kurtosis	-Veta II	2.78
Sample Size 738		
Odm	Percentiles	700
Millimeters		Inches
201.2	1st	7.92
206.0	2nd	8.11
209.2	3rd	8.24
213.6	5th	8.41
220.9	10th	8.70
226.0	15th	8.90
230.1	20th	9.06
233.8	25th	9.21
237.2	30th	9.34
240.3	35th	9.46
243.3	40th	9.58
246.3	45th	9.70
249.2	50th	9.81
252.2	55th	9.93
255.2	60th	10.05
258.3	65th	10.17
261.6	70th	10.30
265.1	75th	10.44
269.1	80th	10.59
273.6	85th	10.77
279.2	90th	10.99
287.0	95th	11.30
291.7	97th	11.48
295.0	98th	11.61
299.6	99th	11.79

(16) Crotch Height

The vertical distance between the standing surface and the crotch is measured with an anthropometer. The subject stands erect looking straight ahead. The heels are together and the weight is distributed equally on both feet.





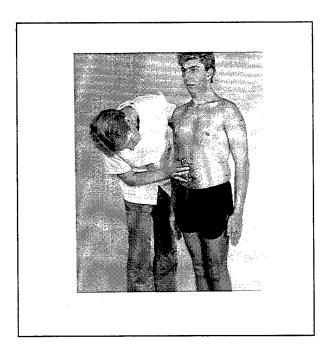
(16) Crotch Height

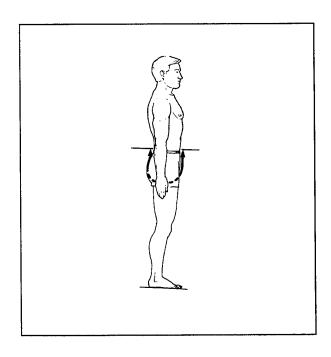
Millimeters Inches 760.8 Mean 29.95 1.9 SE(Mean) 0.07 45.5 StDev 1.79 1.3 SE(StDev) 0.05 594.0 Minimum 23.39 903.0 Maximum 35.55 Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
1.9 SE(Mean) 0.07 45.5 StDev 1.79 1.3 SE(StDev) 0.05 594.0 Minimum 23.39 903.0 Maximum 35.55 Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
45.5 StDev 1.79 1.3 SE(StDev) 0.05 594.0 Minimum 23.39 903.0 Maximum 35.55 Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
45.5 StDev 1.79 1.3 SE(StDev) 0.05 594.0 Minimum 23.39 903.0 Maximum 35.55 Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
594.0 Minimum 23.39 903.0 Maximum 35.55 Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
903.0 Maximum 35.55 Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
Coefficient of Variation 6.0% SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
SymmetryVeta I 0.09 KurtosisVeta II 3.14 Sample Size 582 Percentiles
Sample Size 582 Percentiles
Sample Size 582 Percentiles
Percentiles
I = a
Millimeters Inches
658.5 1st 25.92
669.9 2nd 26.37
677.3 3rd 26.67
687.4 5th 27.06
703.2 10th 27.68
713.9 15th 28.11
722.5 20th 28.44
729.8 25th 28.73
736.5 30th 29.00
742.6 35th 29.24
748.5 40th 29.47
754.1 45th 29.69
759.8 50th 29.91
765.4 55th 30.13
771.1 60th 30.36
777.1 65th 30.59
783.4 70th 30.84 790.3 75th 31.11
798.1 80th 31.42 807.1 85th 31.78
818.8 90th 32.24
836.6 95th 32.94
848.5 97th 33.40
857.4 98th 33.76
872.0 99th 34.33

	Males	
Millimeters		Inches
831.3	Mean	32.73
1.6	SE(Mean)	0.06
44.6	StDev	1.76
1.2	SE(StDev)	0.05
675.0	Minimum	26.57
949.0	Maximum	37.36
Coefficient	of Variation	5.4%
Symmetry-	Veta I	0.02
Kurtosis	-Veta II	2.95
Samr	ole Size	738
<u>-</u>	Percentiles	
Millimeters	}	Inches
724.3	1st	28.52
739.5	2nd	29.11
748.2	3rd	29.46
759.4	5th	29.90
775.4	10th	30.53
785.7	15th	30.93
793.8	20th	31.25
800.8	25th	31.53
807.1	30th	31.77
813.0	35th	32.01
818.7	40th	32.23
824.2	45th	32.45
829.8	50th	32.67
835.5	55th	32.89
841.3	60th	33.12
847.4	65th	33.36
853.9	70th	33.62
861.1	75th	33.90
869.2	80th	34.22
878.6	85th	34.59
890.5	90th	35.06
907.6	95th	35.73
918.0	97th	36.14
925.2	98th	36.42
935.3	99th	36.82

(17) Crotch Length (Omphalion)

The distance between the abdomen at the level of the center of the navel (omphalion) to the same level on the back is measured with a tape passing through the crotch to the right of the genitalia. The tape is held vertically both in front and in back. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet. The measurement is taken at the maximum point of quiet respiration.





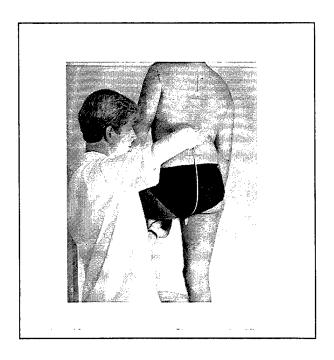
(17) Crotch Length (Omphalion)

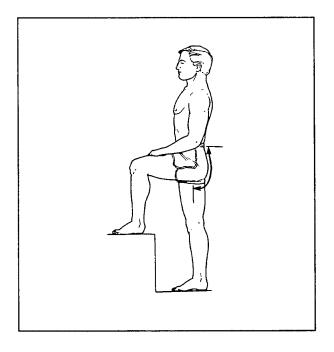
Females		
<u>Millimete</u>		<u>Inches</u>
616.2	Mean	24.26
1.6	SE(Mean)	0.06
39.1	StDev	1.54
1.1	SE(StDev)	0.05
590.0	Minimum	23.23
924.0	Maximum	36.38
Coefficien	t of Variation	6.3%
SymmetryVeta I		0.07
Kurtosis		3.04
Sam	ple Size	582
	Percentiles	
Millimeter	s	Inches
523.3	1st	20.60
536.0	2nd	21.10
543.6	3rd	21.40
553.4	5th	21.79
567.7	10th	22.35
576.9	15th	22.71
584.1	20th	23.00
590.3	25th	23.24
595.8	30th	23.46
600.9	35th	23.66
605.8	40th	23.85
610.5	45th	24.04
615.3	50th	24.22
620.0	55th	24.41
624.9	60th	24.60
630.1	65th	24.81
635.5	70th	25.02
641.6	75th	25.26
648.4	80th	25.53
656.5	85th	25.85
666.9	90th	26.26
682.7	95th	26.88
693.2	97th	27.29
700.9	98th	27.60
713.1	99th	28.08

	Males	
Millimete		<u>Inches</u>
649.3	Mean	25.56
1.6 ·		0.06
43.0	StDev	1.69
1.1	SE(StDev)	0.04
638.0	Minimum	25.12
976.0	Maximum	38.43
Coefficier	nt of Variation	6.6%
Symmetry	/Veta I	0.26
Kurtosis	Veta II	3.17
Sample Size		738
	Percentiles	
Millimeter		Inches
555.1	1st	21.85
565.7	2nd	22.27
572.4	3rd	22.54
581.7	5th	22.90
596.0	10th	23.46
605.7	15th	23.85
613.4	20th	24.15
620.1	25th	24.41
626.1	30th	24.65
631.7	35th	24.87
637.0	40th	25.08
642.2	45th	25.28
647.4	50th	25.49
652.6	55th	25.69
658.0	60th	25.90
663.6	65th	26.13
669.6	70th	26.36
676.2	75th	26.62
683.8	80th	26.92
692.8	85th	27.27
704.6	90th	27.74
723.2	95th	28.47
736.1	97th	28.98
746.1	98th	29.37
762.8	99th	30.03

(18) Crotch Length, Posterior (Omphalion)

The surface distance from the crotch at the inner thigh landmark to the back of the waist at the level of the center of the navel (omphalion) is measured with a tape. The tape passes between the buttocks to the back of the waist. The subject stands with the left foot on a platform so that the knee is flexed.





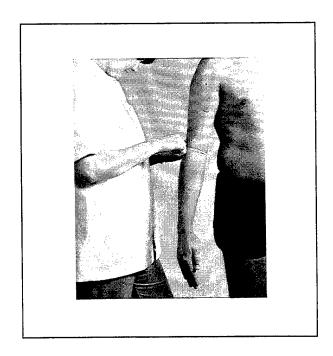
(18) Crotch Length, Posterior (Omphalion)

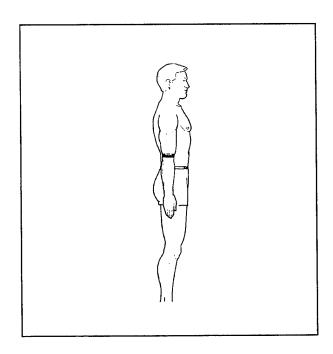
	Females	
Millimeters	<u> </u>	<u>Inches</u>
310.8	Mean	12.24
1.1	SE(Mean)	0.04
25.9	StDev	1.02
0.8	SE(StDev)	0.03
235.0	Minimum	9.25
378.0	Maximum	14.88
Coefficient	of Variation	8.3%
Symmetry-	Veta I Veta II	-0.04
Kurtosis	Veta II	2.92
Sample Size		582
	Percentiles	
Millimeters		Inches
248.5	1st	9.78
256.6	2nd	10.10
261.5	3rd	10.30
268.0	5th	10.55
277.6	10th	10.93
284.0	15th	11.18
288.9	20th	11.38
293.3	25th	11.55
297.1	30th	11.70
300.7	35th	11.84
304.1	40th	11.97
307.4	45th	12.10
310.7	50th	12.23
314.0	55th	12.36
317.3	60th	12.49
320.8	65th	12.63
324.5	70th	12.78
328.5	75th	12.93
333.0	80th	13.11
338.3	85th	13.32
344.8	90th	13.58
354.5	95th	13.96
360.6	97th	14.19
364.9	98th	14.37
371.4	99th	14.62

	Males	
Millimeters	<u> </u>	<u>Inches</u>
318.0	Mean	12.52
0.9	SE(Mean)	0.04
24.3	StDev	0.96
0.6	SE(StDev)	0.02
240.0	Minimum	9.45
403.0	Maximum	15.87
Coefficient	of Variation	7.6%
Symmetry-		0.06
KurtosisVeta II		3.20
Samp	le Size	738
	Percentiles	
Millimeters		Inches
260.8	1st	10.27
267.6	2nd	10.54
272.0	3rd	10.71
278.0	5th	10.95
287.1	10th	11.30
293.2	15th	11.54
298.0	20th	11.73
302.1	25th	11.89
305.7	30th	12.03
309.0	35th	12.16
312.1	40th	12.29
315.1	45th	12.41
318.0	50th	12.52
321.0	55th	12.64
323.9	60th	12.75
327.0	65th	12.87
330.2	70th	13.00
333.7	75th	13.14
337.7	80th	13.30
342.4 348.4	85th	13.48
	90th	13.72
357.9 364.4	95th	14.09
369.4	97th 98th	14.35 14.54
377.9	90th	14.54 14.88
511.5	ฮฮแเ	14.00

(19) Elbow Circumference

The circumference of the right elbow in a plane perpendicular to the long axis of the arm is measured with a tape passing around the elbow at the level of the olecranon-center landmark. The subject stands with the arm straight and slightly away from the side.





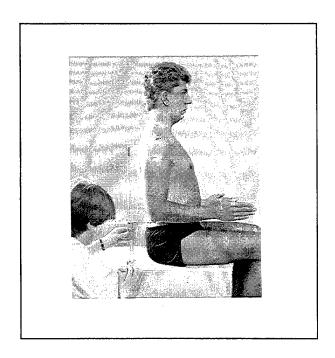
(19) Elbow Circumference

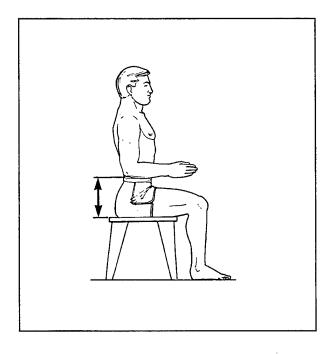
	Eamalas	
Females <u>Millimeters</u>		<u>Inches</u>
238.8	Mean	9.40
0.6	SE(Mean)	0.02
13.7	StDev	0.54
0.4	SE(StDev)	0.02
202.0	Minimum	7.95
290.0	Maximum	11.42
Coefficient	of Variation	5.7%
		0.24
Kurtosis	Veta I	3.12
Nurtosis	-veta II	3.12
Samp	ole Size	582
	Percentiles	
Millimeters	•	Inches
208.7	1st	8.22
211.9	2nd	8.34
214.1	3rd	8.43
216.9	5th	8.54
221.5	10th	8.72
224.6	15th	8.84
227.1	20th	8.94
229.3	25th	9.03
231.3	30th	9.11
233.1	35th	9.18
234.9	40th	9.25
236.6	45th	9.32
238.3	50th	9.38
240.1	55th	9.45
241.8	60th	9.52
243.7	65th	9.59
245.6	70th	9.67
247.8	75th	9.76
250.2	80th	9.85
253.1	85th	9.96
256.7	90th	10.11
262.3	95th	10.32
265.9	97th	10.47
268.7	98th	10.58
273.1	99th	10.75

*************************************	Males	
Millimeters		<u>Inches</u>
278.3	Mean	10.96
0.6	SE(Mean)	0.02
15.4	StDev	0.61
0.4	SE(StDev)	0.02
235.0	Minimum	9.25
339.0	Maximum	13.35
Coefficient	of Variation	5.5%
Symmetry-		0.21
Kurtosis	Veta II	3.12
Samp	le Size	738
	Percentiles	
Millimeters		Inches
244.4	1st	9.62
247.9	2nd	9.76
250.2	3rd	9.85
253.5	5th	9.98
258.6	10th	10.18
262.2	15th	10.32
265.1	20th	10.44
267.6	25th	10.54
269.9	30th	10.62
272.0	35th	10.71
274.0	40th	10.79
275.9	45th	10.86
277.9	50th	10.94
279.8	55th	11.02
281.8	60th	11.09
283.8	65th	11.17
286.0	70th	11.26
288.4	75th	11.35
291.1	80th	11.46
294.2	85th	11.58
298.2	90th	11.74
304.3	95th	11.98
308.4	97th	12.14
311.6 316.6	98th	12.27
0.010	99th	12.47

(20) Elbow Rest Height

The vertical distance between a sitting surface and the olecranon landmark on the bottom of the flexed right elbow is measured with an anthropometer. The subject sits erect looking straight ahead. The shoulders and upper arms are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The measurement is taken at the maximum point of quiet respiration.





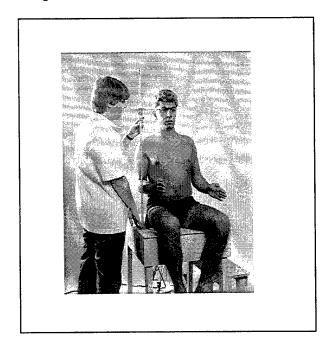
(20) Elbow Rest Height

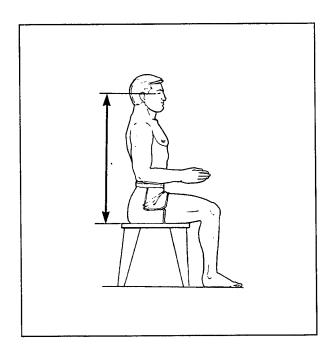
Females		
<u>Millimeters</u>		<u>Inches</u>
231.9	Mean	9.13
0.9	SE(Mean)	0.04
22.4	StDev	0.88
0.7	SE(StDev)	0.03
158.0	Minimum	6.22
300.0	Maximum	11.81
	t of Variation	
Symmetry-	Veta I	-0.11
Kurtosis	-Veta II	3.44
Sam	ole Size	582
	Percentiles	
Millimeters	5	Inches
172.9	1st	6.81
182.4	2nd	7.18
187.8	3rd	7.39
194.7	5th	7.66
204.1	10th	8.04
209.9	15th	8.27
214.3	20th	8.44
218.0	25th	8.58
221.2	30th	8.71
224.1	35th	8.82
226.8	40th	8.93
229.5	45th	9.03
232.1	50th	9.14
234.7	55th	9.24
237.3	60th	9.34
240.1	65th	9.45
243.1	70th	9.57
246.3	75th	9.70
250.0	80th	9.84
254.3	85th	10.01
260.0	90th	10.24
268.7	95th	10.58
274.6	97th	10.81
278.9	98th	10.98
285.9	99th	11.26

Males			
Millimete		<u>Inches</u>	
239.4	Mean	9.43	
0.9	SE(Mean)	0.04	
24.4	StDev	0.96	
0.6	SE(StDev)	0.03	
152.0	Minimum	5.98	
319.0	Maximum	12.56	
Coefficien	t of Variation	10.2%	
Symmetry	/Veta I Veta II	-0.12	
Kurtosis	Veta II	3.34	
Sam	ple Size	736	
	Percentiles	_	
Millimeter		Inches	
178.9	1st	7.04	
186.6	2nd	7.35	
191.5	3rd	7.54	
198.0	5th	7.80	
208.0	10th	8.19	
214.5	15th	8.45	
219.6	20th	8.64	
223.9	25th	8.81	
227.6	30th	8.96	
231.0	35th	9.10	
234.2	40th	9.22	
237.2	45th	9.34	
240.2	50th	9.46	
243.1	55th	9.57	
246.1	60th	9.69	
249.1	65th	9.81	
252.3 255.7	70th 75th	9.93 10.07	
255.7 259.5	75th	10.07 10.22	
263.9	85th	10.22	
269.7	90th	10.39	
278.6	95th	10.02	
284.8	97th	11.21	
289.6	98th	11.40	
297.8	99th	11.72	

(21) Eye Height, Sitting

The vertical distance between a sitting surface and the ectocanthus landmark on the outer corner of the right eye is measured with an anthropometer. The subject sits erect with the head in the Frankfort plane. The shoulders and upper arms are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The thighs are parallel and the knees are flexed 90 degrees with the feet in line with the thighs. The measurement is taken at the maximum point of quiet respiration.





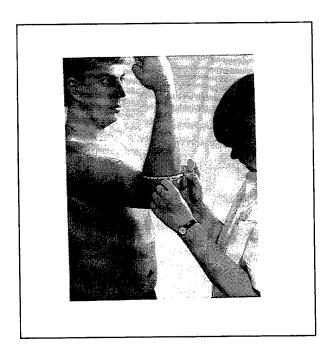
(21) Eye Height, Sitting

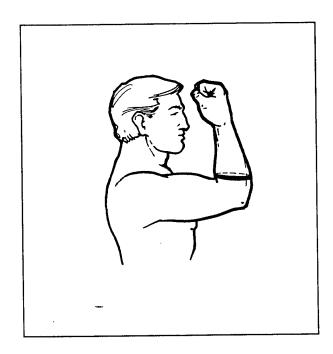
Females		
Millimeters		<u>Inches</u>
750.6	Mean	29.55
1.3	SE(Mean)	0.05
32.3	StDev	1.27
0.9	SE(StDev)	0.04
645.0	Minimum	25.39
864.0	Maximum	34.02
Coefficient	of Variation	4.3%
Symmetry-	Veta I	0.13
Kurtosis	-Veta II	2.96
Sam	ole Size	582
	Percentiles	
Millimeters	3	Inches
679.2	1st	26.74
687.7	2nd	27.08
692.9	3rd	27.28
699.8	5th	27.55
710.3	10th	27.96
717.4	15th	28.24
723.1		28.47
728.2	25th	28.67
732.8	30th	28.85
737.1	35th	29.02
741.2	40th	29.18
745.3	45th	29.34
749.5	50th	29.51
753.6	55th	29.67
757.9	60th	29.84
762.4	65th	30.02
767.1	70th	30.20
772.3	75th	30.41
778.2	80th	30.64
784.9	85th	30.90
793.4	90th	31.23
805.4	95th	31.71
812.6	97th	31.99
817.6	98th	32.19
824.5	99th	32.46

	Males	
Millimeter	<u>'S</u>	<u>Inches</u>
800.8	Mean	31.53
1.2	SE(Mean)	0.05
33.5	StDev	1.32
0.9	SE(StDev)	0.03
673.0	Minimum	26.50
903.0	Maximum	35.55
	t of Variation	4.2%
Symmetry	Veta I	-0.01
Kurtosis	-Veta II	3.19
Sam	ple Size	736
	Percentiles	
Millimeters		Inches
723.0	1st	28.47
732.0	2nd	28.82
737.8	3rd	29.05
745.7	5th	29.36
758.0	10th	29.84
766.4	15th	30.17
772.9	20th	30.43
778.5	25th	30.65
783.6	30th	30.85
788.2	35th	31.03
792.6	40th	31.20
796.8	45th	31.37
800.9	50th	31.53
805.1	55th	31.70
809.3	60th	31.86
813.6	65th	32.03
818.1	70th	32.21
823.1	75th	32.40
828.6	80th	32.62
835.0	85th	32.87
843.2	90th	33.20
855.6	95th	33.68
863.9	97th	34.01
870.1	98th	34.26
880.2	99th	34.66

(22) Forearm Circumference, Flexed

The circumference of the flexed right forearm is measured with a tape passing across the crease at the juncture between the upper arm and the forearm. The measurement is made in a plane perpendicular to the long axis of the forearm. The subject stands with the upper arm extended forward horizontally, the elbow flexed 90 degrees, and the fist tightly clenched and held facing the head.





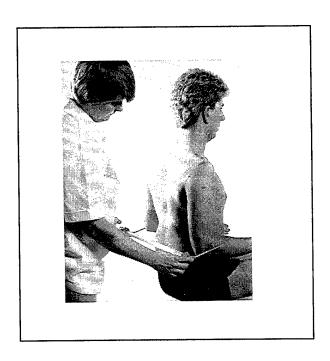
(22) Forearm Circumference, Flexed

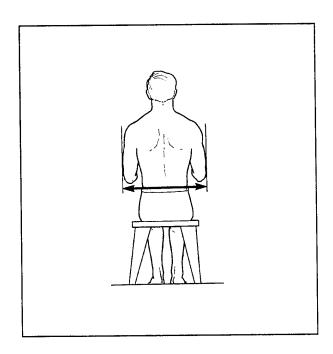
Females			
Millimete		Inches	
<u>imminoto</u>	<u>13</u>	<u>IIICIIES</u>	
252.3	Mean	9.93	
0.6	SE(Mean)	0.02	
15.0	StDev	0.59	
0.4	SE(StDev)	0.02	
212.0	Minimum	8.35	
311.0	Maximum	12.24	
Coefficier	nt of Variation	6.0%	
Symmetr	/Veta I	0.0%	
Kurtosis	Veta II	3.33	
170110313	v Cla II	3.33	
Sam	ple Size	582	
	Percentiles		
Millimeter	s	Inches	
218.4	1st	8.60	
222.5	2nd	8.76	
225.0	3rd	8.86	
228.4	5th	8.99	
233.5	10th	9.19	
237.0	15th	9.33	
239.7	20th	9.44	
242.1	25th	9.53	
244.2	30th	9.62	
246.2	35th	9.69	
248.1	40th	9.77	
249.9	45th	9.84	
251.8	50th	9.91	
253.6	55th	9.99	
255.5	60th	10.06	
257.5	65th	10.14	
259.6	70th	10.22	
261.9	75th	10.31	
264.6	80th	10.42	
267.6	85th	10.54	
271.6	90th	10.69	
277.8	95th	10.94	
281.8	97th	11.10	
284.9	98th	11.22	
289.9	99th	11.41	

Millimeter	Males <u>rs</u>	<u>Inches</u>
303.7	Mean	11.96
0.7	SE(Mean)	0.03
18.4	StDev	0.72
0.5	SE(StDev)	0.02
	(5.52
258.0	Minimum	10.16
375.0	Maximum	14.76
Coefficien	t of Variation	6.1%
	Veta I	
Kurtosis	veia i \/eta II	3.09
1/41/103/3	-vela II	ა.სყ
Samı	ple Size	738
	Percentiles	
Millimeters	3	Inches
262.3	1st	10.33
266.8	2nd	10.51
269.8	3rd	10.62
273.8	5th	10.78
280.2	10th	11.03
284.5	15th	11.20
288.0	20th	11.34
291.0	25th	11.46
293.8	30th	11.57
296.3	35th	11.67
298.7	40th	11.76
301.1	45th	11.85
303.4	50th	11.95
305.8	55th	12.04
308.2	60th	12.13
310.6	65th	12.23
313.2	70th	12.33
316.1	75th	12.44
319.2	80th	12.57
322.9	85th	12.71
327.6	90th	12.90
334.5	95th	13.17
339.0	97th	13.34
342.3	98th	13.47
347.4	99th	13.68

(23) Forearm-Forearm Breadth

The maximum horizontal distance across the upper body between the outer sides of the forearms is measured with a beam caliper. The subject sits erect looking straight ahead. The shoulders and upper arms are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The measurement is taken at the maximum point of quiet respiration.





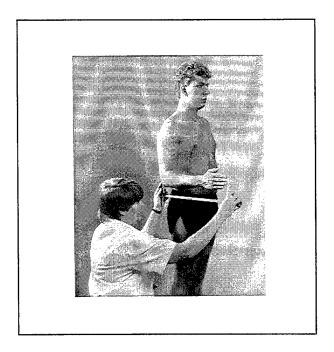
(23) Forearm-Forearm Breadth

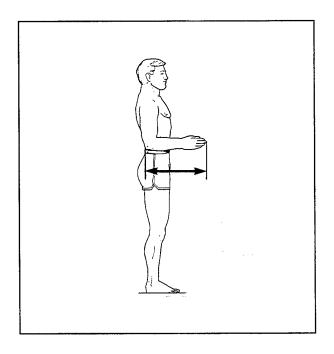
Females		
Millimeter		Inches
471.9	Mean	18.58
1.5	SE(Mean)	0.06
36.1	StDev	1.42
1.1	SE(StDev)	0.04
373.0	Minimum	14.68
607.0	Maximum	23.90
Coefficient	of Variation	7.6%
Symmetry-	Veta I	0.35
Kurtosis	-Veta II	3.40
Sam	ole Size	582
	Percentiles	
Millimeters		Inches
397.7	1st	15.66
404.2	2nd	15.91
408.9	3rd	16.10
415.6	5th	16.36
426.8	10th	16.80
434.7	15th	17.12
441.2	20th	17.37
446.9	25th	17.59
452.0	30th	17.80
456.8	35th	17.98
461.4	40th	18.16
465.8		18.34
470.3	50th	18.52
474.8	55th	18.69
479.3	60th	18.87
484.1	65th	19.06
489.1	70th	19.26
494.7	75th	19.47
501.0	80th	19.72
508.4 518.1	85th	20.01
533.2	90th 95th	20.40 20.99
543.7	95th 97th	20.99 21.40
551.8	97th	21.40
565.5	99th	21.73
2.00	ษษเท	22.26

	Males	
Millimeters		<u>Inches</u>
550.6	Mean	21.68
1.7	SE(Mean)	0.07
45.2	StDev	1.78
1.2	SE(StDev)	0.05
406.0	Minimum	15.98
688.0	Maximum	27.09
	of Variation	
Symmetry		0.13
Kurtosis	Veta II	2.91
Samp	le Size	736
	Percentiles	
Millimeters		Inches
453.2	1st	17.84
461.6	2nd	18.17
467.8	3rd	18.42
476.9	5th	18.78
492.3	10th	19.38
503.1	15th	19.81
511.9	20th	20.15
519.5	25th	20.45
526.4	30th	20.72
532.7	35th	20.97
538.6	40th	21.21
544.4	45th	21.43
550.1	50th	21.66
555.7	55th	21.88
561.4	60th	22.10
567.3	65th	22.34
573.5	70th	22.58
580.3	75th	22.85
587.9	80th	23.14
596.8	85th	23.49
608.3	90th	23.95
626.6	95th	24.67
639.4	97th	25.17
649.5	98th	25.57
666.8	99th	26.25

(24) Forearm-Hand Length

The horizontal distance between the back of the tip of the right elbow to the tip of the right middle finger is measured with a beam caliper. The subject stands erect with the upper arms hanging at the sides and the right elbow flexed 90 degrees. The hand is held out straight with the palm facing inward.





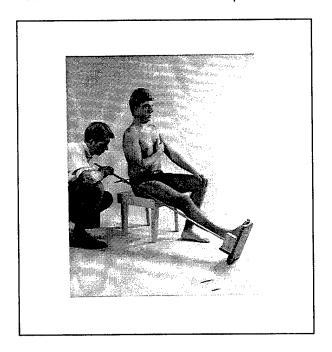
(24) Forearm-Hand Length

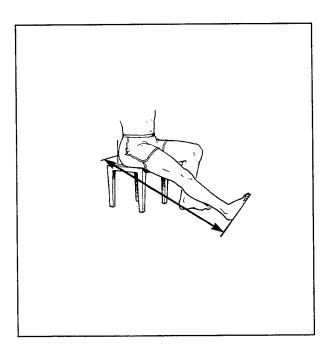
	Females	
Millimeters		Inches
435.0	Mean	17.13
0.9	SE(Mean)	0.04
22.0	StDev	0.87
0.6	SE(StDev)	0.03
324.0	Minimum	12.76
515.0	Maximum	20.28
Coefficien	nt of Variation	5.1%
	/Veta I	
Kurtosis	Veta II	4.19
Cama	mla Cima	500
Sam	ple Size	582
Millimanton	Percentiles	lan ala a a
Millimeter		Inches
388.1	1st	15.28
393.4	2nd	15.49
396.7	3rd	15.62
401.3 408.4	5th	15.80
413.2	10th	16.08
417.1	15th 20th	16.27
420.4		16.42
420.4	25th 30th	16.55
426.2	35th	16.67
428.9	40th	16.78 16.88
431.5	45th	16.88
434.1	50th	17.09
436.7	55th	17.09
439.3	60th	17.19
442.2	65th	17.41
445.2	70th	17.53
448.5	75th	17.66
452.2	80th	17.80
456.7	85th	17.98
462.6	90th	18.21
471.8	95th	18.58
478.2	97th	18.83
483.1	98th	19.02
491.2	99th	19.34

	Males	
Millimeters	<u>s</u>	<u>Inches</u>
480.9	Mean	18.94
0.8	SE(Mean)	0.03
21.1	StDev	0.83
0.5	SE(StDev)	0.02
397.0	Minimum	15.63
570.0	Maximum	22.44
Coefficient	of Variation	4.4%
Symmetry-		0.18
Kurtosis	Veta II	3.30
Samp	le Size	738
	Percentiles	_
Millimeters		Inches
437.0	1st	17.21
440.6	2nd	17.35
443.3	3rd	17.45
447.2	5th	17.60
453.8	10th	17.87
458.6	15th	18.05
462.5	20th	18.21
466.0	25th	18.35
469.1	30th	18.47
472.1	35th	18.59
474.9	40th	18.70
477.7	45th	18.81
480.4	50th	18.91
483.1	55th	19.02
485.9	60th	19.13
488.7	65th	19.24
491.8	70th	19.36
495.0	75th	19.49
498.7	80th	19.63
502.9	85th	19.80
508.2	90th	20.01
516.2	95th	20.32
521.4	97th	20.53
525.3	98th	20.68
531.5	99th	20.93

(25) Functional Leg Length

The straight-line distance between the plane of the bottom of the right foot with the leg extended and the back of the body of a seated subject is measured with an anthropometer passing over the trochanter landmark on the side of the hip. The subject sits erect on a stool 40.8 cm high. The right leg is extended and the foot is on the base plate of the anthropometer, which rests on the floor. The measurement is made from the footrest surface of the base plate.





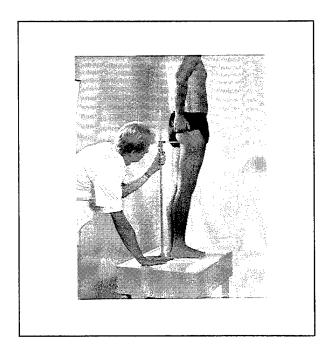
(25) Functional Leg Length

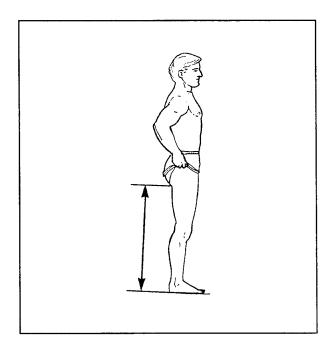
	Females	
Millimeters		Inches
1004.8	Mean	39.56
2.2	SE(Mean)	0.08
52.0	StDev	2.05
1.5	SE(StDev)	0.06
819.0	Minimum	32.24
1166.0	Maximum	45.91
Coefficien	t of Variation	5.2%
Symmetry	Veta I	0.04
Kurtosis	Veta II	3.19
Sam	ple Size	582
	Percentiles	
Millimeters	S .	Inches
879.6	1st	34.63
897.5	2nd	35.34
907.9	3rd	35.75
921.2	5th	36.27
940.0	10th	37.01
952.1	15th	37.49
961.6	20th	37.86
969.7	25th	38.18
977.0	30th	38.46
983.8	35th	38.73
990.3	40th	38.99
996.7	45th	39.24
1003.1	50th	39.49
1009.6	55th	39.75
1016.2	60th	40.01
1023.2	65th	40.28
1030.6	70th	40.58
1038.8	75th	40.90
1048.0	80th	41.26
1058.8	85th	41.69
1072.5	90th	42.22
1092.5	95th	43.01
1104.9 1113.7	97th	43.50 43.84
	98th	
1126.3	99th	44.34

	Males	
Millimeters	<u> </u>	<u>Inches</u>
1080.6	Mean	42.54
1.9	SE(Mean)	0.07
51.5	StDev	2.03
1.3	SE(StDev)	0.05
881.0	Minimum	34.69
1247.0	Maximum	49.09
	of Variation	4.8%
Symmetry-	Veta I	0.04
Kurtosis	Veta II	2.98
Samp	le Size	738
	Percentiles	
Millimeters		Inches
965.4	1st	38.01
979.1	2nd	38.55
987.5	3rd	38.88
998.8	5th	39.32
1015.9	10th	40.00
1027.5	15th	40.45
1036.9	20th	40.82
1045.1	25th	41.14
1052.5	30th	41.44
1059.5	35th	41.71
1066.2	40th	41.98
1072.8	45th	42.24
1079.4	50th	42.50
1086.0	55th	42.76
1092.9	60th	43.03
1100.0	65th	43.31
1107.5	70th	43.60
1115.7	75th	43.93
1124.9	80th	44.29
1135.6	85th	44.71
1148.9	90th	45.23
1167.9	95th	45.98
1179.4	97th	46.43
1187.4	98th	46.75
1198.8	99th	47.20

(26) Gluteal Furrow Height

The vertical distance between a standing surface and the lowest point of the gluteal furrow(s) under the right buttock is measured with an anthropometer. The subject stands erect with the heels together and the weight distributed equally on both feet.





(26) Gluteal Furrow Height

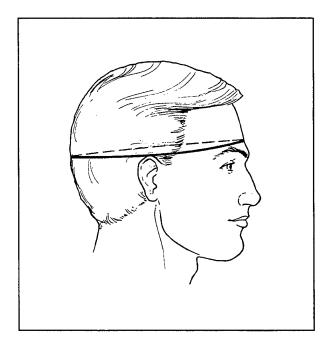
Females		
<u>Millimete</u>		<u>Inches</u>
734.5	Mean	28.92
1.9	SE(Mean)	0.07
45.6	StDev	1.79
1.3	SE(StDev)	0.05
568.0	Minimum	22.36
885.0	Maximum	34.84
	t of Variation	
Symmetry	/Veta I	0.08
Kurtosis	Veta II	3.24
Sam	ple Size	582
	Percentiles	
Millimeter		Inches
627.5	1st	24.70
641.7	2nd	25.26
650.2	3rd	25.60
661.2	5th	26.03
677.5	10th	26.67
688.2	15th	27.09
696.5	20th	27.42
703.7	25th	27.71
710.2	30th	27.96
716.2	35th	28.20
721.9	40th	28.42
727.6	45th	28.64
733.2	50th	28.86
738.8	55th	29.09
744.6	60th	29.32
750.7	65th	29.55
757.2	70th	29.81
764.3	75th	30.09
772.4	80th	30.41
781.8	85th	30.78
794.0	90th	31.26
812.4	95th	31.98
824.3	97th	32.45
833.1	98th	32.80
846.7	99th	33.33

	Males	
<u>Millimeter</u>		<u>Inches</u>
809.6	Mean	31.87
1.6	SE(Mean)	0.06
43.8	StDev	1.72
1.1	SE(StDev)	0.04
649.0	Minimum	25.55
932.0	Maximum	36.69
Coefficien	t of Variation	5.4%
Symmetry		-0.04
Kurtosis	-Veta II	2.96
Sam	ple Size	738
	Percentiles	
Millimeters		Inches
704.3	1st	27.73
719.5	2nd	28.33
728.3	3rd	28.67
739.2	5th	29.10
754.8	10th	29.72
764.9	15th	30.11
772.8	20th	30.42
779.7	25th	30.70
785.9	30th	30.94
791.7	35th	31.17
797.4	40th	31.39
802.9	45th	31.61
808.5	50th	31.83
814.2	55th	32.05
820.0	60th	32.28
826.1	65th	32.52
832.5	70th	32.78
839.6	75th	33.06
847.5	80th	33.37
856.6	85th	33.72
867.7	90th	34.16
883.0	95th	34.76
891.5	97th	35.10
896.8	98th	35.31
903.1	99th	35.55

(27) Head Circumference

The maximum circumference of the head above the attachment of the ears to the head is measured with a tape passing just above the ridges of the eyebrows and around the back of the head.





(27) Head Circumference

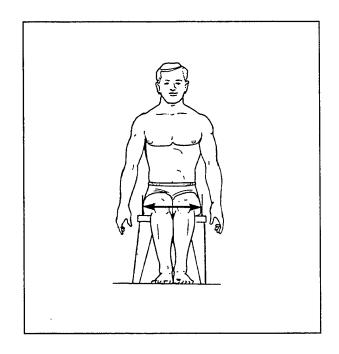
Females		
<u>Millimeters</u>		<u>Inches</u>
544.5	Mean	21.44
0.6	SE(Mean)	0.02
14.1	StDev	0.56
0.4	SE(StDev)	0.02
505.0	Minimum	19.88
611.0	Maximum	24.06
Coefficient	of Variation	2.6%
Symmetry-	Veta I	0.13
Kurtosis	-Veta II	3.59
Samp	ole Size	582
	Percentiles	
Millimeters		Inches
510.5	1st	20.10
515.1	2nd	20.28
517.8	3rd	20.39
521.3	5th	20.53
526.6	10th	20.73
530.0	15th	20.87
532.7	20th	20.97
535.0	25th	21.06
537.1	30th	21.15
539.0	35th	21.22
540.8	40th	21.29
542.6	45th	21.36
544.4	50th	21.43
546.2	55th	21.50
548.0	60th	21.57
549.9	65th	21.65
551.9	70th	21.73
554.0	75th	21.81
556.5	80th	21.91
559.2	85th	22.02
1		
562.7 567.7 570.8 572.9 576.0	90th 95th 97th 98th 99th	22.15 22.35 22.47 22.56 22.68

Males			
Millimete	<u>rs</u>	<u>Inches</u>	
569.3	Mean	22.41	
0.6	SE(Mean)	0.02	
15.7	StDev	0.62	
0.4	SE(StDev)	0.02	
518.0	Minimum	20.39	
633.0	Maximum	24.92	
	t of Variation	2.8%	
Symmetry	/Veta I	0.23	
Kurtosis	Veta II	3.35	
Sam	ple Size	737	
	Percentiles		
Millimeter	s	Inches	
533.7	1st	21.01	
538.1	2nd	21.18	
540.7	3rd	21.29	
544.3	5th	21.43	
549.6	10th	21.64	
553.2	15th	21.78	
556.0	20th	21.89	
558.5	25th	21.99	
560.7	30th	22.08	
562.8	35th	22.16	
564.8	40th	22.24	
566.7	45th	22.31	
568.7	50th	22.39	
570.7	55th	22.47	
572.7	60th	22.55	
574.8	65th	22.63	
577.0	70th	22.72	
579.5	75th	22.82	
582.3	80th	22.93	
585.6	85th	23.05	
589.8	90th	23.22	
596.2	95th	23.47	
600.3	97th	23.63	
603.3	98th	23.75	
608.1	99th	23.94	

(28) Hip Breadth, Sitting

The distance between the lateral points of the hips or thighs (whichever are broader) is measured with a beam caliper. The subject sits erect with the feet and knees together.





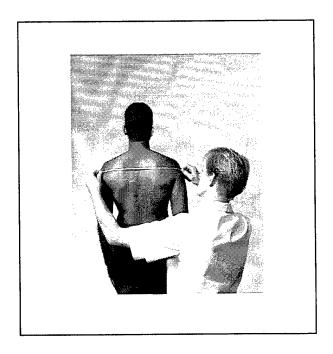
(28) Hip Breadth, Sitting

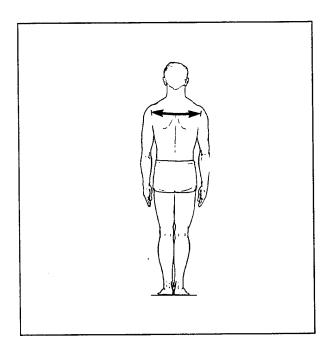
Millimeters Inche 391.9 Mean 15.43	<u>s</u>
1	
1.2 SE(Mean) 0.05	
28.8 StDev 1.14	
0.8 SE(StDev) 0.03	
310.0 Minimum 12.20	
482.0 Maximum 18.98	
Coefficient of Variation 7.4%	
SymmetryVeta I 0.29 KurtosisVeta II 2.94	
KurtosisVeta II 2.94	
Sample Size 582	
Percentiles	
Millimeters Inches	
327.6 1st 12.90	
337.3 2nd 13.28	
342.6 3rd 13.49	
349.1 5th 13.74	
357.8 10th 14.09	
363.5 15th 14.31	
367.9 20th 14.48	
371.8 25th 14.64	
375.5 30th 14.78	
379.0 35th 14.92	
382.4 40th 15.06	
385.9 45th 15.19	
389.4 50th 15.33	
393.1 55th 15.48	
396.9 60th 15.63	
401.1 65th 15.79	
405.6 70th 15.97	
410.6 75th 16.16 416.3 80th 16.39	
431.7 90th 17.00 444.1 95th 17.48	
451.5 97th 17.78	
451.5 97th 17.76 456.4 98th 17.97	
462.9 99th 18.22	

	Males	
Millimeters	<u> </u>	<u>Inches</u>
373.5	Mean	14.70
0.9	SE(Mean)	0.04
25.2	StDev	0.99
0.7	SE(StDev)	0.03
311.0	Minimum	12.24
484.0	Maximum	19.06
Coefficient	of Variation	6.7%
Symmetry-		0.37
Kurtosis	Veta II	3.05
Samp	le Size	736
	Percentiles	_
Millimeters		Inches
323.5	1st	12.74
327.9	2nd	12.91
330.8	3rd	13.02
335.0	5th	13.19
342.0	10th	13.46
347.1	15th	13.67
351.4	20th	13.83
355.2	25th	13.99
358.8	30th	14.13
362.2	35th	14.26
365.4	40th	14.39
368.7	45th	14.51
371.9	50th	14.64
375.2	55th	14.77
378.6	60th	14.91
382.2	65th	15.05
386.0	70th	15.20
390.2	75th	15.36
394.9	80th	15.55
400.3 407.2	85th	15.76
417.2	90th 95th	16.03
423.4	95th 97th	16.42
423.4	97th 98th	16.67 16.85
434.5	90th	17.11
404.0	ອອແາ	17.11

(29) Interscye II

The distance across the back between the right and left midscye landmarks is measured with a tape. The tape is held on the skin surface except where it spans the hollow of the back. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.





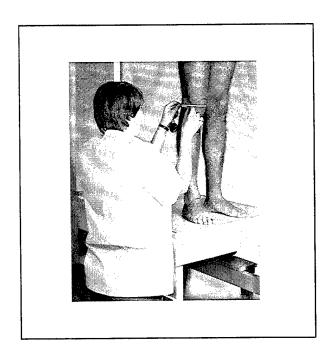
(29) Interscye II

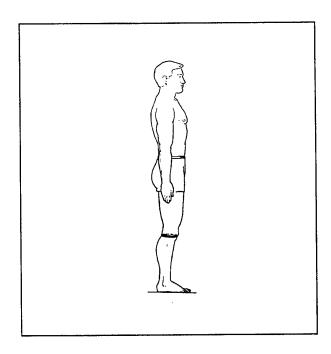
Millimeters Inche	<u>s</u>
276 6 Moon 44 00	
376.6 Mean 14.83	
1.0 SE(Mean) 0.04	
25.0 StDev 0.99	
0.7 SE(StDev) 0.03	
300.0 Minimum 11.81	
470.0 Maximum 18.50	
Coefficient of Variation 6.6%	
SymmetryVeta I 0.01	
KurtosisVeta II 2.97	
Sample Size 582	
Percentiles	
Millimeters Inches	
319.5 1st 12.58	
325.2 2nd 12.80	
329.1 3rd 12.96	
334.6 5th 13.17	
343.6 10th 13.53	
349.8 15th 13.77	
354.8 20th 13.97	
359.2 25th 14.14	
363.1 30th 14.30	
366.8 35th 14.44	
370.2 40th 14.58	
373.6 45th 14.71	
376.8 50th 14.84	
380.1 55th 14.97	
383.4 60th 15.09	
386.8 65th 15.23	
390.3 70th 15.37	
394.1 75th 15.52	
398.3 80th 15.68	
403.1 85th 15.87 409.1 90th 16.11	
409.1 90th 16.11 417.7 95th 16.44	
423.1 95th 16.44 423.1 97th 16.66	
423.1 97th 16.66 427.1 98th 16.82	
433.2 99th 17.06	

	Males	
Millimeter		<u>Inches</u>
409.1	Mean	16.11
1.0	SE(Mean)	0.04
27.1	StDev	1.07
0.7	SE(StDev)	0.03
329.0	Minimum	12.95
505.0	Maximum	19.88
Coefficient	of Variation	6.6%
Symmetry-	Veta I	0.10
Kurtosis	-Veta II	3.14
Samr	ole Size	738
	Percentiles	
Millimeters		inches
348.9	1st	13.74
354.7	2nd	13.97
358.8	3rd	14.13
364.7	5th	14.36
374.3	10th	14.74
381.0	15th	15.00
386.4	20th	15.21
391.0	25th	15.39
395.1	30th	15.55
398.9	35th	15.70
402.4	40th	15.84
405.9	45th	15.98
409.2	50th	16.11
412.6	55th	16.24
415.9	60th	16.38
419.4	65th	16.51
423.0	70th	16.65
427.0	75th	16.81
431.4	80th	16.98
436.6	85th	17.19
443.3	90th	17.45
453.9	95th	17.87
461.4	97th	18.16
467.3	98th	18.40
477.4	99th	18.79

(30) Knee Circumference

The horizontal circumference of the right knee at the level of the midpatella landmark at the center of the knee is measured with a tape. The subject stands erect with the feet about 10 cm apart and the weight distributed equally on both feet.





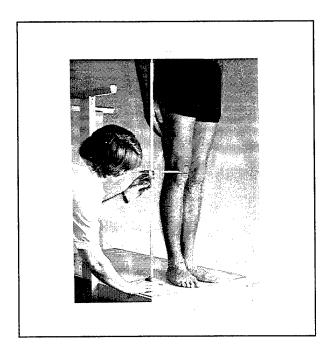
(30) Knee Circumference

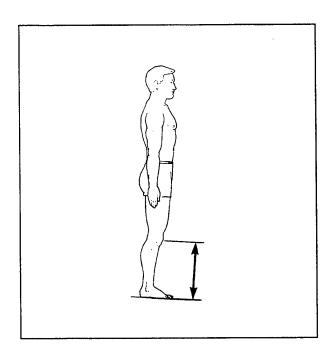
Females		
<u>Millimeter</u>	<u>Inches</u>	
366.1	Mean	14.42
1.0	SE(Mean)	0.04
24.5	StDev	0.96
0.7	SE(StDev)	0.03
303.0	Minimum	11.93
457.0	Maximum	17.99
Coefficien	t of Variation	6.7%
Symmetry	Veta I	0.39
Kurtosis	Veta II	3.37
Sam	ple Size	580
	Percentiles	
Millimeters	3	Inches
313.5	1st	12.34
319.6	2nd	12.58
323.4	3rd	12.73
328.5	5th	12.93
336.4	10th	13.25
341.8	15th	13.45
346.0	20th	13.62
349.6	25th	13.77
352.9	30th	13.90
356.0	35th	14.02
359.0	40th	14.13
361.8	45th	14.25
364.7	50th	14.36
367.7	55th	14.48
370.7	60th	14.59
373.9	65th	14.72
377.3	70th	14.85
381.1	75th	15.00
385.5	80th	15.18
390.7	85th	15.38
397.7	90th	15.66
408.9	95th	16.10
416.7	97th	16.41
422.8	98th	16.65
433.1	99th	17.05

Males		
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>
389.7	Mean	15.34
0.8	SE(Mean)	0.03
23.0	StDev	0.90
0.6	SE(StDev)	0.02
333.0	Minimum	13.11
470.0	Maximum	18.50
	t of Variation	5.9%
Symmetry		0.23
Kurtosis	-Veta II	2.94
Samı	ole Size	732
	Percentiles	
Millimeters		Inches
340.6	1st	13.41
345.1.	2nd	13.58
348.1	3rd	13.71
352.6	5th	13.88
360.1	10th	14.18
365.4	15th	14.38
369.7	20th	14.55
373.5	25th	14.70
376.9	30th	14.84
380.1	35th	14.97
383.2	40th	15.09
386.2	45th	15.20
389.1	50th	15.32
392.1	55th	15.44
395.1	60th	15.56
398.2	65th	15.68
401.5	70th	15.81
405.1	75th	15.95
409.1	80th	16.11
413.7	85th	16.29
419.6	90th	16.52
428.4	95th	16.87
434.2	97th	17.09
438.5	98th	17.26
445.4	99th	17.54

(31) Knee Height, Midpatella

The vertical distance between a standing surface and the midpatella landmark at the center of the right knee is measured with an anthropometer. The subject stands erect with the heels together and the weight distributed equally on both feet.





(31) Knee Height, Midpatella

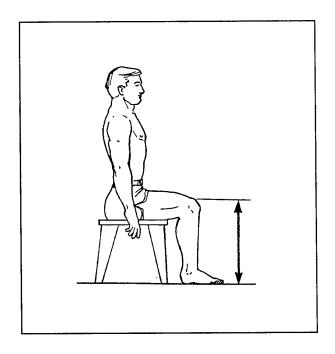
Females <u>Millimeters</u>		<u>Inches</u>
453.7	Mean	17.86
1.1	SE(Mean)	0.04
27.1	StDev	1.07
0.8	SE(StDev)	0.03
358.0	Minima	14.00
536.0	Minimum	14.09
536.0	Maximum	21.10
Coefficien	t of Variation	6.0%
Symmetry	Veta I	0.08
Kurtosis		3.25
Sam	ple Size	580
	Percentiles	
Millimeters	3	Inches
391.7	1st	15.42
398.9	2nd	15.71
403.6	3rd	15.89
409.9	5th	16.14
419.6	10th	16.52
426.1	15th	16.78
431.2	20th	16.98
435.6	25th	17.15
439.6	30th	17.31
443.2	35th	17.45
446.6	40th	17.58
450.0	45th	17.71
453.2 456.5	50th	17.84
450.5 459.9	55th 60th	17.97
463.4	65th	18.11
467.0	70th	18.24 18.39
471.1	75th	18.55
471.1	75th 80th	18.73
481.1	85th	18.94
488.2	90th	19.22
499.4	95th	19.22
507.2	97th	19.00
513.2	98th	20.20
523.4	99th	20.61

Males		
Millimeters	<u>5</u>	<u>Inches</u>
503.0	Mean	19.80
1.0	SE(Mean)	0.04
27.0	StDev	1.06
0.7	SE(StDev)	0.03
406.0	Minimum	15.98
577.0	Maximum	22.72
	of Variation	5.4%
Symmetry		0.02
Kurtosis	Veta II	2.91
Samp	le Size	733
	Percentiles	
Millimeters		Inches
440.1	1st	17.33
448.1	2nd	17.64
452.9	3rd	17.83
459.2	5th	18.08
468.7	10th	18.45
475.1	15th	18.70
480.1	20th	18.90
484.5	25th	19.07
488.4	30th	19.23
492.1	35th	19.37
495.6	40th	19.51
499.0	45th	19.65
502.5	50th	19.78
505.9	55th	19.92
509.5	60th	20.06
513.2	65th	20.20
517.1	70th	20.36
521.4	75th	20.53
526.3	80th	20.72
531.9	85th	20.94
538.9	90th	21.22
549.2	95th	21.62
555.6	97th	21.88
560.2	98th	22.05
566.8	99th	22.32

(32) Knee Height, Sitting

The vertical distance between a footrest surface and the suprapatella landmark at the top of the right knee (located and drawn while the subject stands) is measured with an anthropometer. The subject sits with the thighs parallel, the knees flexed 90 degrees, and the feet in line with the thighs.





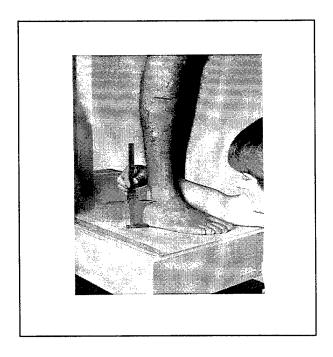
(32) Knee Height, Sitting

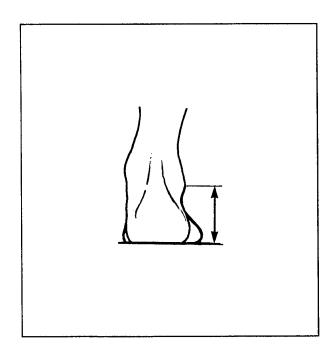
	Females	
<u>Millimeters</u>		<u>Inches</u>
510.7	Mean	20.11
1.1	SE(Mean)	0.04
27.6	StDev	1.08
0.8	SE(StDev)	0.03
0.0	02(0.000)	0.00
406.0	Minimum	15.98
608.0	Maximum	23.94
Coefficier	nt of Variation	5 A0/
	yVeta I	
Kurtosis	Veta II	3.39
Nullosis	vela II	3.38
Sam	ple Size	582
	Percentiles	
Millimeter	s	Inches
449.7	1st	17.71
457.0	2nd	17.99
461.5	3rd	18.17
467.6	5th	18.41
476.7	10th	18.77
482.8	15th	19.01
487.7	20th	19.20
492.0	25th	19.37
495.8	30th	19.52
499.4	35th	19.66
502.9	40th	19.80
506.2	45th	19.93
509.6	50th	20.06
513.0	55th	20.20
516.5	60th	20.33
520.2	65th	20.48
524.1	70th	20.63
528.4	75th	20.80
533.2	80th	20.99
539.0	85th	21.22
546.4	90th	21.51
557.6	95th	21.95
564.9	97th	22.24
570.4	98th	22.46
579.0	99th	22.79

	Males	
Millimeters		<u>Inches</u>
557.5	Mean	21.95
1.0	SE(Mean)	0.04
27.4	StDev	1.08
0.7	SE(StDev)	0.03
454.0	Minimum	17.87
636.0	Maximum	25.04
Coefficien	t of Variation	4.9%
Symmetry	/Veta I	0.06
Kurtosis	Veta II	2.98
Sam	ple Size	736
	Percentiles	
Millimeter	S	Inches
495.6	1st	19.51
503.0	2nd	19.80
507.6	3rd	19.98
513.7	5th	20.22
523.0	10th	20.59
529.3	15th	20.84
534.3	20th	21.03
538.7	25th	21.21
542.6	30th	21.36
546.3	35th	21.51
549.9	40th	21.65
553.3	45th	21.78
556.8	50th	21.92
560.3	55th	22.06
563.8	60th	22.20
567.6	65th	22.34
571.5	70th	22.50
575.8	75th	22.67
580.7	80th	22.86
586.3	85th	23.08
593.5	90th	23.37
604.0	95th	23.78
610.7	97th	24.04
615.5	98th	24.23
622.7	99th	24.52

(33) Lateral Malleolus Height

The vertical distance between a standing surface and the lateral malleolus landmark on the outside of the right ankle is measured with a modified sliding caliper. The subject stands erect with the heels together and the weight distributed equally on both feet.





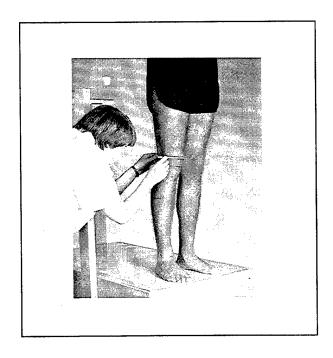
(33) Lateral Malleolus Height

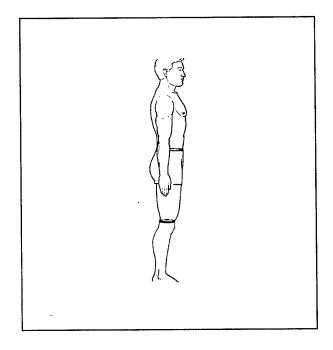
	Females	
<u>Millimeter</u>	<u>Millimeters</u>	
62.2	Mean	2.45
0.2	SE(Mean)	0.01
5.4	StDev	0.21
0.2	SE(StDev)	0.01
46.0	Minimum	1.81
83.0	Maximum	3.27
Coefficient	t of Variation	8.7%
Symmetry	Veta I	0.33
Kurtosis		3.33
Sam	ole Size	580
	Percentiles	
Millimeters		Inches
51.2	1st	2.02
52.3	2nd	2.06
53.0	3rd	2.09
53.9	5th	2.12
55.5	10th	2.19
56.6	15th	2.23
57.6	20th	2.27
58.4	25th	2.30
59.1	30th	2.33
59.8	35th	2.36
60.5	40th	2.38
61.2	45th	2.41
61.9	50th	2.44
62.6	55th	2.46
63.3	60th	2.49
64.0	65th	2.52
64.8	70th	2.55
65.7	75th	2.59
66.7	80th	2.63
67.8	85th	2.67
69.3	90th	2.73
71.5	95th	2.82
72.9	97th	2.87
74.0	98th	2.91
75.6	99th	2.98

	Males	
<u>Millimeters</u>		<u>Inches</u>
68.2	Mean	2.68
0.2	SE(Mean)	0.01
5.5	StDev	0.22
0.1	SE(StDev)	0.01
52.0	Minimum	2.05
88.0	Maximum	3.46
Coefficient	of Variation	8.0%
Symmetry-	Veta I	0.22
Kurtosis	-Veta II	3.31
Samp	ole Size	733
	Percentiles	
Millimeters		Inches
55.0	1st	2.17
57.1	2nd	2.25
58.2	3rd	2.29
59.6	5th	2.35
61.6	10th	2.42
62.8	15th	2.47
63.7	20th	2.51
64.5	25th	2.54
65.3	30th	2.57
65.9	35th	2.60
66.6	40th	2.62
67.2	45th	2.65
67.9	50th	2.67
68.5	55th	2.70
69.2	60th	2.73
69.9	65th	2.75
70.7 71.6	70th	2.78
71.6 72.6	75th	2.82
73.8	80th 85th	2.86 2.90
75.8 75.3	90th	2.90
77.6	95th	2.97 3.06
77.0 79.1	97th	3.00 3.11
80.2	98th	3.11
81.8	99th	3.10

(34) Lower Thigh Circumference

The horizontal circumference of the right thigh at the level of the suprapatella landmark at the top of the knee is measured with a tape. The subject stands erect with the feet about 10 cm apart and the weight distributed equally on both feet.





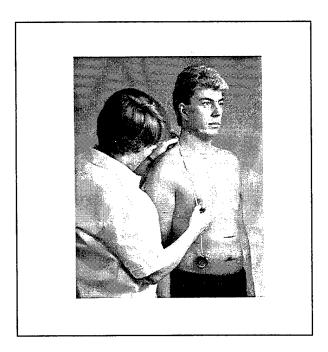
(34) Lower Thigh Circumference

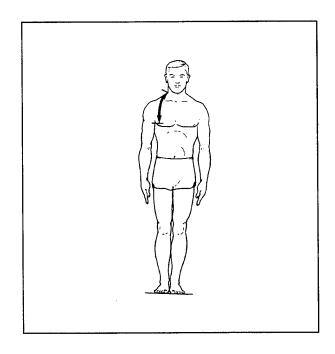
Females		
<u>Millimeters</u>		<u>Inches</u>
379.4	Mean	14.94
1.2	SE(Mean)	0.05
28.4	StDev	1.12
0.8	SE(StDev)	0.03
304.0	Minimum	11.97
475.0	Maximum	18.70
Coefficien	t of Variation	7.5%
Symmetry	Veta I	0.41
Kurtosis	-Veta II	3.28
Sam	ple Size	580
	Percentiles	
Millimeter		Inches
317.1	1st	12.49
325.7	2nd	12.82
330.7	3rd	13.02
337.0	5th	13.27
346.0	10th	13.62
351.7	15th	13.85
356.3	20th	14.03
360.2	25th	14.18
363.8	30th	14.32
367.1	35th	14.45
370.4	4 0th	14.58
373.6	45th	14.71
376.9	50th	14.84
380.3	55th	14.97
383.8	60th	15.11
387.6	65th	15.26
391.7	70th	15.42
396.3	75th	15.60
401.7	80th	15.81
408.2	85th	16.07
416.9	90th	16.41
430.6	95th	16.95
440.1	97th	17.32
447.2	98th	17.61
458.9	99th	18.07

	Males	
<u>Millimete</u>	<u>rs</u>	<u>Inches</u>
396.5	Mean	15.61
1.0	SE(Mean)	0.04
28.2	StDev	1.11
0.7	SE(StDev)	0.03
329.0	Minimum	12.95
490.0	Maximum	19.29
100.0	Maximani	10.20
Coefficien	t of Variation	7.1%
Symmetry		0.20
Kurtosis	Veta II	2.99
Sam	ple Size	733
	Percentiles	
Millimeter	s	Inches
333.8	1st	13.14
340.2	2nd	13.39
344.5	3rd	13.56
350.5	5th	13.80
360.2	10th	14.18
366.9	15th	14.45
372.3	20th	14.66
377.0	25th	14.84
381.3	30th	15.01
385.2	35th	15.16
388.9	40th	15.31
392.5	45th	15.45
396.1	50th	15.59
399.7	55th	15.73
403.3	60th	15.88
407.0	65th	16.03
411.0	70th	16.18
415.3	75th	16.35
420.2	80th	16.54
425.9	85th	16.77
433.2	90th	17.06
444.4	95th	17.50
452.0	97th	17.79
457.7	98th	18.02
467.2	99th	18.39

(35) Neck-Bustpoint/Thelion Length

The distance between the trapezius landmark at the right side of the neck and the right bustpoint landmark on women or the right nipple (thelion) on men is measured with a tape. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.





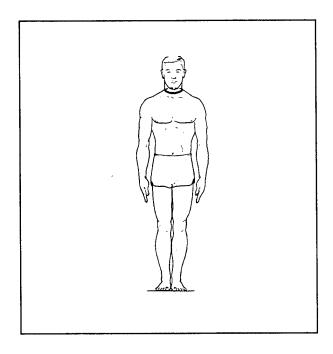
(35) Neck-Bustpoint / Thelion Length

Females		
<u>Millimeter</u>	Millimeters	
269.1	Mean	10.60
0.9	SE(Mean)	0.03
21.1	StDev	0.83
0.6	SE(StDev)	0.02
210.0	Minimum	8.27
347.0	Maximum	13.66
Coefficient	of Variation	7.9%
Symmetry-	Veta I	0.27
Kurtosis	-Veta II	3.14
Samp	ole Size	582
	Percentiles	
Millimeters		Inches
223.3	1st	8.79
228.6	2nd	9.00
231.9	3rd	9.13
236.3	5th	9.30
243.1	10th	9.57
247.6	15th	9.75
251.3	20th	9.89
254.5	25th	10.02
257.5	30th	10.14
260.2	35th	10.24
262.8	40th	10.35
265.4	45th	10.45
268.0	50th	10.55
270.7	55th	10.66
273.4	60th	10.76
276.3	65th	10.88
279.3	70th	11.00
282.7	75th	11.13
286.6	80th	11.28
291.1 296.9	85th	11.46
305.7	90th	11.69 12.04
311.5	95th 97th	12.04
315.7	97th 98th	12.43
1		-
322.4	99th	12.69

(36) Neck Circumference

The circumference of the neck at the level of the infrathyroid landmark (Adam's apple) is measured with a tape. The plane of the measurement is perpendicular to the long axis of the neck. The subject stands erect with the head in the Frankfort plane. The shoulders and upper extremities are relaxed.





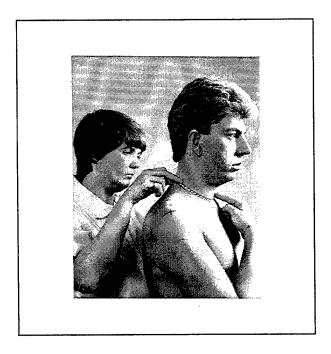
(36) Neck Circumference

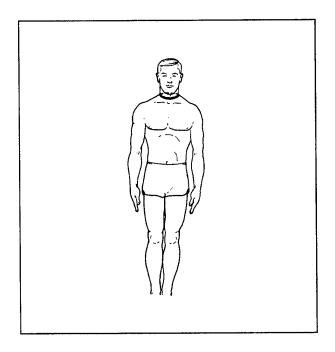
	Females	
Millimeters		Inches
314.9	Mean	12.40
0.6	SE(Mean)	0.03
15.5	StDev	0.61
0.5	SE(StDev)	0.02
277.0	Minimum	10.91
371.0	Maximum	14.61
Coefficien	t of Variation	4.9%
	Veta I	
Kurtosis	Veta II	3.28
		V. _
Sam	ple Size	582
	Percentiles	
Millimeter		Inches
284.3	1st	11.19
287.9	2nd	11.34
290.0	3rd	11.42
292.7	5th	11.52
296.7	10th	11.68
299.4	15th	11.79
301.6	20th	11.87
303.6	25th	11.95
305.5	30th	12.03
307.4 309.2	35th	12.10
311.0	40th 45th	12.17 12.24
312.9	50th	12.24
314.9	55th	12.32
317.0	60th	12.48
319.2	65th	12.57
321.7	70th	12.66
324.4	75th	12.77
327.6	80th	12.90
331.4	85th	13.05
336.3	90th	13.24
343.7	95th	13.53
348.4	97th	13.72
351.7	98th	13.85
356.6	99th	14.04

	Males	
<u>Millimete</u>	<u>rs</u>	<u>Inches</u>
382.0	Mean	15.04
0.7	SE(Mean)	0.03
19.9	StDev	0.78
0.5	SE(StDev)	0.02
317.0	Minimum	12.48
468.0	Maximum	18.43
l .	t of Variation	
Symmetry		0.35
Kurtosis	Veta II	3.61
Sam	ple Size	738
	Percentiles	
Millimeter		Inches
339.7	1st	13.37
344.4	2nd	13.56
347.3	3rd	13.67
351.4	5th	13.83
357.6	10th	14.08
362.0	15th	14.25
365.4	20th	14.39
368.4	25th	14.51
371.2	30th	14.61
373.8	35th	14.72
376.2	40th	14.81
378.7	45th	14.91
381.1	50th	15.00
383.5	55th	15.10
386.1 388.7	60th 65th	15.20
391.5	70th	15.30 15.41
394.6	70th	15.41
398.2	80th	15.5 4 15.68
402.3	85th	15.84
407.7	90th	16.05
416.0	95th	16.38
421.5	97th	16.59
425.6	98th	16.76
432.2	99th	17.02

(37) Neck Circumference, Base

The circumference of the base of the neck is measured by a tape passing over the drawn lateral and anterior neck landmarks. The subject stands erect with the head in the Frankfort plane. The shoulders and upper extremities are relaxed.





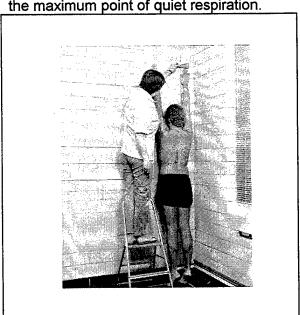
(37) Neck Circumference, Base

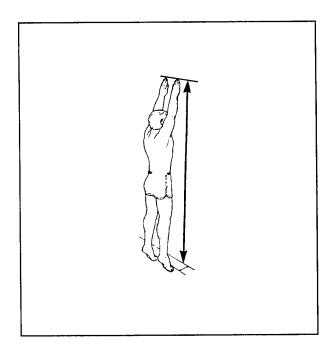
Females				
<u>Millimeter</u>	Inches			
	33.23.02			
345.7	Mean	13.61		
0.7	SE(Mean)	0.03		
16.5	StDev	0.65		
0.5	SE(StDev)	0.02		
308.0	Minimum	12.13		
398.0	Maximum	15.67		
Coefficient	of Variation	4.8%		
Symmetry-	Veta I			
Kurtosis	-Veta II	3.14		
Samp	ole Size	582		
	Percentiles			
Millimeters	;	Inches		
310.8	1st	12.24		
315.0	2nd	12.40		
317.5	3rd	12.50		
320.7	5th	12.63		
325.6	10th	12.82		
328.9	15th	12.95		
331.6	20th	13.05		
334.0	25th	13.15		
336.1	30th	13.23		
338.2	35th	13.31		
340.2	40th	13.39		
342.2	45th	13.47		
344.3	50th	13.55		
346.4	55th	13.64		
348.5	60th	13.72		
350.9 353.4	65th	13.81		
356.2	70th 75th	13.91		
359.4	75th 80th	14.02 14.15		
363.2	85th	14.15		
368.3	90th	14.50		
375.9	95th	14.80		
380.8	97th	14.99		
384.5				
390.1	15.14 15.36			

Males				
Millimeters	<u>Inches</u>			
410.0	410.0 Mean			
0.8	SE(Mean)	16.14 0.03		
21.2	StDev	0.83		
0.6	SE(StDev)	0.02		
345.0	Minimum	13.58		
505.0	Maximum	19.88		
	of Variation	5.2%		
Symmetry-		0.30		
Kurtosis	Veta II	3.63		
Samp	le Size	738		
	Percentiles			
Millimeters		Inches		
361.7	1st	14.24		
367.5	2nd	14.47		
371.2	3rd	14.61		
376.1	5th	14.81		
383.6	10th	15.10		
388.6	15th	15.30		
392.5	20th	15.45		
395.9				
398.9	398.9 30th			
401.7	401.7 35th			
404.4				
406.9	106.9 45th			
409.5	50th	16.12		
412.0	55th	16.22		
414.6	60th	16.32		
417.3	65th	16.43		
420.2	70th	16.54		
423.4	75th	16.67		
427.0	80th	16.81		
431.3	85th	16.98		
436.9	90th	17.20 17.55		
445.8	145.8 95th			
451.9	- · · · ·			
456.7 98th 464.6 99th		17.98		
464.6	18.29			

(38) Overhead Fingertip Reach, Extended

The vertical distance between a standing surface and the tip of the right middle finger when the arm is extended overhead as high as possible is measured on a wall scale. The subject stands on his/her toes facing a wall-mounted scale with both arms parallel and extended overhead as high as possible. The toes are 20 cm from the wall and the feet are about 10 cm apart. The palms of the hands rest on the scale. A block is placed against the tip of the finger to establish the measurement. The measurement is taken at the maximum point of quiet respiration.





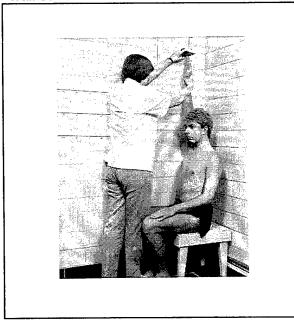
(38) Overhead Fingertip Reach, Extended

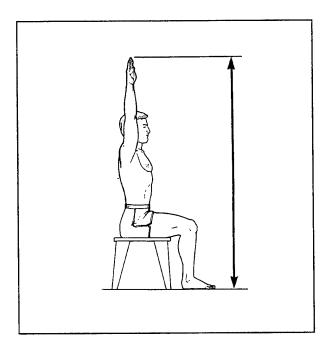
Females			
<u>Millimeter</u>	<u>Inches</u>		
2144.3	Mean	84.42	
4.1	SE(Mean)	0.16	
99.4	StDev	3.91	
2.9	SE(StDev)	0.11	
1820.0	Minimum	71.65	
2464.0	Maximum	97.01	
Coefficient	t of Variation	4.6%	
Symmetry-	Veta I -Veta II	0.02	
Kurtosis	-Veta II	3.17	
Sam	ole Size	580	
	Percentiles		
Millimeters	3	Inches	
1904.1	1st	74.97	
1938.3	2nd	76.31	
1958.3	3rd	77.10	
1983.8	5th	78.10	
2020.5	10th	79.55	
2044.1	15th	80.48	
2062.4	20th	81.20	
2078.3	25th	81.82	
2092.4	2092.4 30th		
2105.5	2105.5 35th		
2118.1	118.1 40th		
2130.3	45th	83.87	
2142.5	50th	84.35	
2154.9	55th	84.84	
2167.5	60th	85.33	
2180.7	65th	85.85	
2194.7	70th	86.41	
2210.0	75th	87.01	
2227.3			
2247.4	2247.4 85th		
2272.7	90th	89.48	
2309.5			
2332.3	2332.3 97th		
2348.3	92.45		
2371.4	93.36		

Males					
Millimeters Inches					
2329.5	Mean	91.71			
3.7	SE(Mean)	0.15			
100.3	StDev	3.95			
2.6	SE(StDev)	0.10			
1917.0	Minimum	75.47			
2642.0	Maximum	104.02			
Coefficient	of Variation	4.3%			
	Veta I	0.01			
Kurtosis		3.03			
NullOSIS	vela II	3.03			
Samp	le Size	733			
	Percentiles				
Millimeters		Inches			
2096.7	1st	82.55			
2129.0	2nd	83.82			
2147.6	3rd	84.55			
2171.3	5th	85.49			
2205.6	10th	86.83			
2228.0	15th	87.72			
2245.7	20th	88.41			
2261.2	25th	89.02			
2275.3	30th	89.58			
2288.5	35th	90.10			
2301.3	40th	90.60			
2313.9	45th	91.10			
2326.6	50th	91.60			
2339.5	55th	92.11			
2352.8	60th	92.63			
2366.7	65th	93.18			
2381.6	70th	93.76			
2397.8	75th	94.40			
2416.1	80th	95.12			
2437.2	85th	95.95			
2463.4	90th	96.98			
2500.0	95th	98.42			
2521.2	2521.2 97th				
2535.0	99.26 99.80				
2552.8	100.50				

(39) Overhead Fingertip Reach, Sitting

The vertical distance between a sitting surface and the tip of the right middle finger of a seated subject whose arm is extended overhead is measured on a wall scale. The subject sits erect on a flat surface 40.8 cm high with the right arm and hand extended vertically overhead as far as possible and the palm of the hand facing forward. Neither the back nor the arm touches a wall. A block placed at the tip of the middle finger spans the distance between the finger and the wall and establishes the measurement on the wall scale. The measurement is made at the maximum point of quiet respiration.





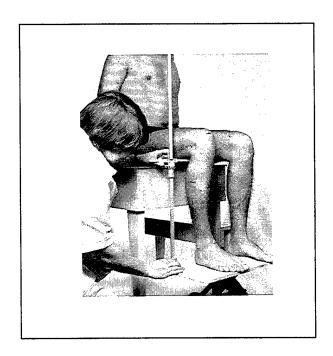
(39) Overhead Fingertip Reach, Sitting

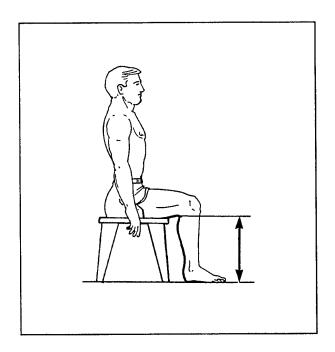
Females				
<u>Millimeter</u>	<u>Inches</u>			
1323.2	Mean	52.09		
2.4	SE(Mean)	0.09		
56.8	StDev	2.24		
1.7	SE(StDev)	0.07		
1129.0	Minimum	44.45		
1490.0	Maximum	58.66		
Coefficient	of Variation	4.3%		
Symmetry-	Veta I -Veta II	-0.01		
Kurtosis	-Veta II	3.04		
Samp	ole Size	580		
	Percentiles			
Millimeters		Inches		
1189.6	1st	46.84		
1206.7	2nd	47.51		
1217.1	3rd	47.92		
1231.0	5th	48.46		
1251.7	10th	49.28		
1265.3	15th	49.82		
1276.1	20th	50.24		
1285.3	25th	50.60 50.93		
1293.6				
	1301.2 35th			
	1308.5 40th			
1	1315.6 45th			
1322.6	50th	52.07		
1329.6	55th	52.35		
1336.8	60th	52.63		
1344.2	65th	52.92		
1352.1	70th	53.23		
1360.7	75th	53.57 53.95		
	1370.4 80th			
1381.7	85th	54.40		
1396.0	90th	54.96		
1417.4	95th	55.80 56.35		
L	1431.3 97th			
	1441.4 98th 1457.2 99th			
1457.2	57.37			

Males				
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>		
1438.0	Mean	56.61		
2.2	SE(Mean)	0.09		
59.2	StDev	2.33		
1.5	SE(StDev)	0.06		
1164.0	Minimum	45.83		
1633.0	Maximum	64.29		
Coefficient	t of Variation	4.1%		
Symmetry	Veta I -Veta II	-0.01		
Kurtosis	-Veta II	3.44		
Samı	ole Size	733		
	Percentiles			
Millimeters		Inches		
1303.5	1st	51.32		
1319.3	2nd	51.94		
1329.3	3rd	52.33		
1342.7	5th	52.86		
1363.2	10th	53.67		
1377.0	15th	54.21		
1388.0	20th	54.65		
1397.6	25th	55.02		
1406.2	30th	55.36		
1414.2	35th	55.68		
1421.8	40th	55.98		
1429.2	45th	56.27		
1436.6	50th	56.56		
1444.0	55th	56.85		
1451.6	60th	57.15		
1459.4	65th	57.46		
1467.8	70th	57.79		
1476.9	75th	58.14 58.55		
1487.1				
	1498.9 85th			
	1514.0 90th			
	1536.4 95th			
	1550.9 97th			
1561.4 98th 1577.8 99th		61.47		
1577.8	62.12			

(40) Popliteal Height

The vertical distance from a footrest surface to the back of the right knee (the popliteal fossa at the dorsal juncture of the right calf and thigh) is measured with an anthropometer. The subject sits with the thighs parallel, the feet in line with the thighs, and the knees flexed 90 degrees.





(40) Popliteal Height

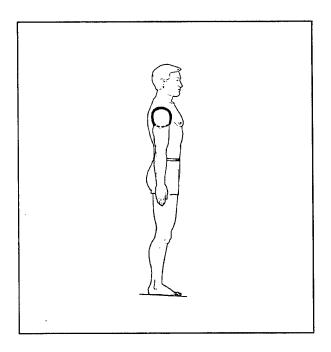
Females				
<u>Millimete</u>	<u>Inches</u>			
384.9	84.9 Mean			
1.0	SE(Mean)	0.04		
24.4	StDev	0.96		
0.7	SE(StDev)	0.03		
299.0	Minimum	11.77		
461.0	Maximum	18.15		
Coefficien	t of Variation	6.3%		
Symmetry		0.11		
Kurtosis		3.12		
Sam	ple Size	582		
	Percentiles			
Millimeter		Inches		
331.3	1st	13.04		
337.4	2nd	13.28		
341.2	3rd	13.43		
346.3	5th	13.64		
354.3	10th	13.95		
359.8	15th	14.17		
364.2	20th	14.34		
368.0	25th	14.49		
371.5	30th	14.63		
374.8	35th	14.76		
377.9	377.9 40th			
381.0	381.0 45th			
384.1	384.1 50th			
387.2	55th	15.24		
390.4	60th	15.37		
393.7	65th	15.50		
397.2	70th	15.64		
401.1	75th	15.79		
405.5	105.5 80th			
410.6	85th	16.17		
417.1	90th	16.42		
426.7	95th	16.80 17.05		
433.0				
437.5 98th 444.4 99th		17.22		
444.4	17.50			

Males				
Millimeter	<u>Inches</u>			
431.4	Mean	16.99		
0.9	SE(Mean)	0.03		
23.9	StDev	0.94		
0.6	SE(StDev)	0.02		
338.0	Minimum	13.31		
500.0	Maximum	19.69		
	of Variation	5.5%		
Symmetry-		0.01		
Kurtosis	-Veta II	3.15		
Samp	le Size	736		
	Percentiles			
Millimeters		Inches		
375.4	1st	14.78		
382.7	2nd	15.07		
387.1	3rd	15.24		
392.9	5th	15.47		
401.5	10th	15.81		
407.2	15th	16.03		
411.6	20th	16.20		
415.4	25th	16.35		
418.8	30th	16.49		
422.0	35th	16.61		
425.0	40th	16.73 16.85		
428.0				
430.9	50th	16.96		
433.9	55th	17.08		
436.9	60th	17.20		
440.0	65th	17.32		
443.4	70th	17.46		
447.1	75th	17.60		
451.2	80th	17.77		
456.1	85th	17.96 18.21		
462.4				
471.9				
	178.1 97th			
482.7 98th 489.9 99th		19.00		
489.9	19.29			

(41) Scye Circumference

The vertical circumference of the right upper arm (scye) is measured with a tape passing through the armpit and over the acromion landmark on the tip of the shoulder. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed with the palms facing the thighs.





(41) Scye Circumference

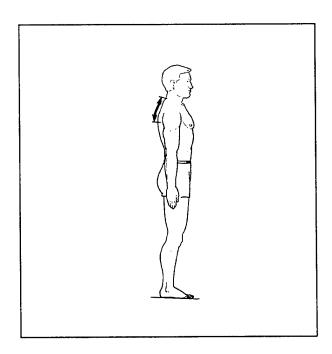
Females				
Millimeter	<u>Inches</u>			
374.4	Mean	14.74		
1.0	SE(Mean)	0.04		
23.8	StDev	0.94		
0.7	SE(StDev)	0.03		
312.0	Minimum	12.28		
462.0	Maximum	18.19		
	t of Variation	6.4%		
	Veta I	0.46		
Kurtosis	-Veta II	3.17		
Sam	ole Size	582		
	Percentiles			
Millimeters		Inches		
326.9	1st	12.87		
331.7	2nd	13.06		
334.7	3rd	13.18		
338.9	5th	13.34		
345.5	10th	13.60		
350.2	15th	13.79		
354.0	20th	13.94		
357.5	25th	14.07		
360.6	30th	14.20		
363.7	35th	14.32		
366.6	40th	14.43		
369.5	45th	14.55 14.66		
	572.5 50th			
375.5	55th	14.78		
378.7	60th	14.91		
382.0	65th	15.04		
385.6	70th	15.18		
389.6	75th	15.34		
394.1	80th	15.52		
399.6	85th	15.73		
406.6	90th	16.01		
417.4	95th	16.43 16.71		
l .	124.5 97th			
429.8 98th 438.1 99th		16.92 17.25		
430.1	17.25			

Males				
<u>Millimeter</u>	<u>Inches</u>			
450.5	Mean	17.73		
1.0	SE(Mean)	0.04		
27.6	StDev	1.09		
0.7	SE(StDev)	0.03		
	Minimum	14.49		
543.0	Maximum	21.38		
Coefficient	t of Variation	6.1%		
Symmetry	Veta I	0.19		
Kurtosis	-Veta II	3.03		
Sam	ple Size	738		
	Percentiles			
Millimeters	6	Inches		
390.1	1st	15.36		
397.0	2nd	15.63		
401.3	3rd	15.80		
407.1	5th	16.03		
416.1	10th	16.38		
422.2	15th	16.62		
427.1	20th	16.81		
431.4	25th	16.98		
435.3	30th	17.14 17.28		
438.9				
442.5	40th	17.42		
445.9	45th	17.56		
449.4	50th	17.69		
452.9	55th	17.83		
456.5	60th	17.97		
460.3	65th	18.12		
464.3	70th	18.28		
468.8	75th	18.46		
473.8	80th	18.65		
479.6	85th	18.88		
487.1	90th	19.18 19.61		
	498.1 95th			
1	505.2 97th			
510.4	98th	20.09		
518.3	99th	20.40		

(42) Scye Depth

The surface distance along the spine between the cervicale landmark on the base of the back of the neck and the scye-level-at-midspine landmark is measured with a tape. The subject stands erect with the head in the Frankfort plane. The shoulders and upper extremities are relaxed.



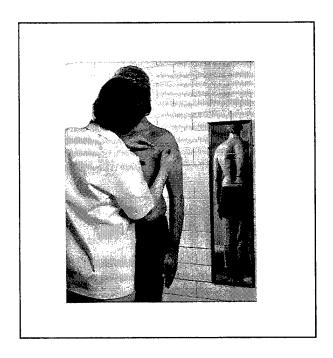


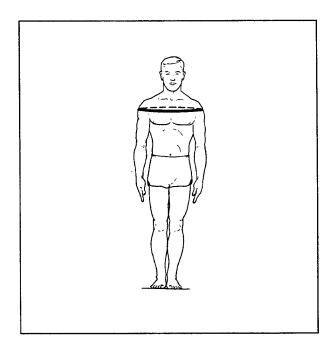
(42) Scye Depth

	Females Males					
Millimeter		Inches		Millimeters		<u>Inches</u>
in in it is a second	<u>u</u>	inones		<u>ivilimite te</u>	<u>19</u>	inches
188.2	Mean	7.41		217.1	Mean	8.55
0.6	SE(Mean)	0.02		0.6	SE(Mean)	0.02
14.8	StDev	0.58		15.4	StDev	0.61
0.4	SE(StDev)	0.02		0.4	SE(StDev)	0.02
	,					0.02
142.0	Minimum	5.59		176.0	Minimum	6.93
238.0	Maximum	9.37		284.0	Maximum	11.18
	t of Variation	7.8%		Coefficien	t of Variation	7.1%
Symmetry		0.28		Symmetry		0.33
Kurtosis	Veta II	3.06		Kurtosis	Veta II	3.78
Sam	ple Size	582		Sam	ple Size	738
	Percentiles				Percentiles	
Millimeters		Inches		Millimeter		Inches
157.4	1st	6.20		183.3	1st	7.21
161.1	2nd	6.34		187.1	2nd	7.37
163.3	3rd	6.43		189.5	3rd	7.46
166.2	5th	6.54	·	192.9	5th	7.59
170.4	10th	6.71		198.1	10th	7.80
173.3	15th	6.82		201.6	15th	7.94
175.6	20th	6.91		204.4	20th	8.05
177.7	25th	7.00		206.9	25th	8.14
179.7	30th	7.07		209.1	30th	8.23
181.5	35th	7.15		211.1	35th	8.31
183.3	40th	7.22		213.0	40th	8.39
185.2	45th	7.29		214.9	45th	8.46
187.0	50th	7.36		216.8	50th	8.53
188.9	55th	7.44		218.6	55th	8.61
190.9	60th	7.52		220.5	60th	8.68
193.0	65th	7.60		222.5	65th	8.76
195.3	70th	7.69		224.6	70th	8.84
197.8	75th	7.79		226.9	75th	8.93
200.6	80th	7.90		229.6	80th	9.04
204.0	85th	8.03		232.6	85th	9.16
208.2	90th	8.20		236.6	90th	9.32
214.4	95th	8.44		242.7	95th	9.56
218.2	97th	8.59		246.9	97th	9.72
220.8	98th	8.69		250.0	98th	9.84
224.4	99th	8.83]	255.2	99th	10.05

(43) Shoulder Circumference

The horizontal circumference of the shoulders at the level of the maximum protrusion of the right deltoid muscle is measured with a tape. The subject stands erect looking straight ahead. The shoulders and upper extremities are relaxed with the palms facing the thighs. The measurement is taken at the maximum point of quiet respiration.





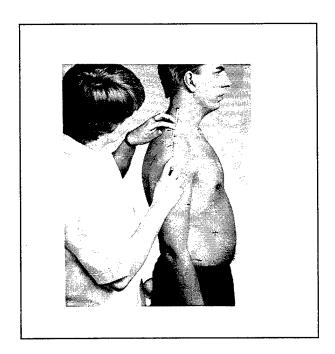
(43) Shoulder Circumference

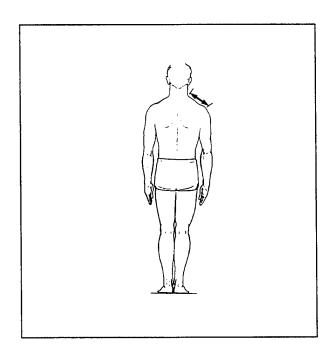
Females				
Millimeters	<u>Inches</u>			
1024.9	Mean	40.35		
2.2	SE(Mean)	0.09		
53.2	StDev	2.09		
1.6	SE(StDev)	0.06		
862.0	Minimum	33.94		
1192.0	Maximum	46.93		
	of Variation	5.2%		
Symmetry-	Veta I	0.23		
Kurtosis	-Veta II	3.22		
Samp	ole Size	582		
	Percentiles			
Millimeters	i	Inches		
905.4	1st	35.64		
920.2	2nd	36.23		
929.3	3rd	36.59		
941.3	5th	37.06		
959.3	10th	37.77		
971.2	15th	38.24		
980.6	20th	38.61		
988.8	25th	38.93		
996.1	30th	39.22		
1003.0	35th	39.49		
1009.5	40th	39.75		
1015.9	45th	40.00		
1022.4	50th	40.25		
1028.9	55th	40.51		
1035.6	60th	40.77		
1042.6	65th	41.05		
1050.2	70th	41.35		
1058.6	75th	41.68		
1068.1	80th	42.05		
1079.5	85th	42.50		
1094.5	90th	43.09		
1117.7	95th	44.00		
1133.5	97th	44.62 45.40		
1145.5	98th	45.10		
1164.9	99th	45.86		

	Males	
<u>Millimeters</u>	Inches	
<u>iminino ters</u>	<u>mones</u>	
1181.5	Mean	46.52
2.3	SE(Mean)	0.09
62.5	StDev	2.46
1.6	SE(StDev)	0.06
1007.0	Minimum	39.65
1401.0	Maximum	55.16
0 5	es	5.00/
Symmetry	Veta I	
Kurtosis	veta II	3.04
Sampl	le Size	738
	Percentiles	
Millimeters		Inches
1033.2	1st	40.68
1051.0	2nd	41.38
1062.3	3rd	41.82
1077.7	5th	42.43
1101.3	10th	43.36
1117.1	15th	43.98
1129.4	20th	44.47
	25th	44.88
	30th	
1		
1		
1		
1		
1		
1		
Coefficient Symmetry Kurtosis\text{Sample} Millimeters 1033.2 1051.0 1062.3 1077.7 1101.3 1117.1	of VariationVeta I Veta II le Size Percentiles 1st 2nd 3rd 5th 10th 15th 20th 25th	5.3% 0.04 3.04 738 Inches 40.68 41.38 41.82 42.43 43.36 43.98 44.47

(44) Shoulder Length

The surface distance between the trapezius landmark at the base of the side of the neck and the acromion landmark on the tip of the right shoulder is measured with a tape. The subject stands looking straight ahead. The shoulders and upper extremities are relaxed.





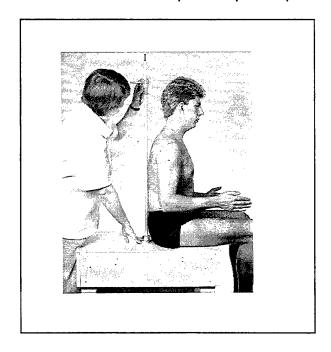
(44) Shoulder Length

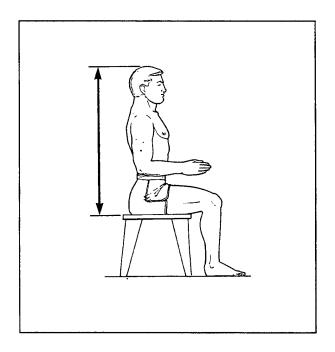
Females			
<u>Millimeter</u>	<u>Inches</u>		
143.8	Mean	5.66	
0.5	SE(Mean)	0.02	
11.3	StDev	0.44	
0.3	SE(StDev)	0.01	
109.0	Minimum	4.29	
179.0	Maximum	7.05	
Coefficient	of Variation	7.8%	
Symmetry-	Veta I -Veta II	-0.07	
Kurtosis	-Veta II	3.22	
Samp	ole Size	582	
	Percentiles		
Millimeters		Inches	
115.3	1st	4.54	
119.1	2nd	4.69	
121.5	3rd	4.78	
124.6	5th	4.91	
129.2	10th	5.09	
132.2	15th	5.21	
134.6	20th	5.30	
136.5	25th	5.37	
138.2	30th	5.44	
139.8	35th	5.50	
141.2	40th	5.56	
142.6	45th	5.62	
144.0	50th	5.67	
145.4	55th	5.72	
146.7	60th	5.78	
148.1	65th	5.83 5.89	
	49.6 70th		
	51.2 75th		
	53.0 80th		
155.1	85th	6.11	
157.9	90th	6.22	
162.2	95th	6.39	
165.2	97th	6.50	
167.5	98th	6.59 6.75	
171.4	171.4 99th		

	Males	
<u>Millimeter</u>	<u>s</u>	<u>Inches</u>
150.9	Mean	5.94
0.4	SE(Mean)	0.02
11.1	StDev	0.44
0.3	SE(StDev)	0.01
114.0	Minimum	4.49
185.0	Maximum	7.28
	of Variation	7.4%
Symmetry-		0.14
Kurtosis	-Veta II	3.07
Samp	le Size	738
	Percentiles	
Millimeters		Inches
125.3	1st	4.93
128.6	2nd	5.06
130.5	3rd	5.14
133.2	5th	5.24
137.0	10th	5.40
139.6	15th	5.50
141.6	20th	5.58
143.4	25th	5.64
144.9	30th	5.71
146.4	35th	5.76
147.8	40th	5.82
149.2	45th	5.87
150.5	50th	5.93
151.9	55th	5.98
153.3	60th	6.04
154.8	65th	6.09
156.4	70th	6.16
158.1	75th	6.22
160.1	80th	6.30
162.4	85th	6.39
165.3	90th	6.51
169.9	95th	6.69
172.8	97th	6.80
175.0	98th	6.89
178.4	99th	7.03

(45) Sitting Height

The vertical distance between a sitting surface and the top of the head is measured with an anthropometer. The subject sits erect with the head in the Frankfort plane. The shoulders and upper arms are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The thighs are parallel and the knees are flexed 90 degrees with the feet in line with the thighs. The measurement is made at the maximum point of quiet respiration.





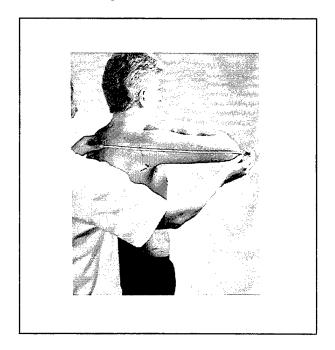
(45) Sitting Height

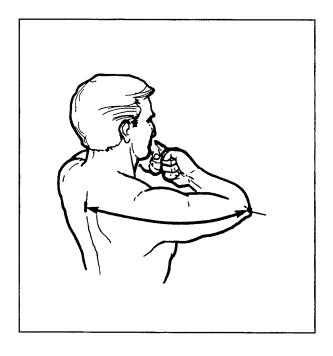
Females				
Millimeter	<u>Inches</u>			
864.6	Mean	34.04		
1.4	SE(Mean)	0.05		
33.5	StDev	1.32		
1.0	SE(StDev)	0.04		
7540	1. 4° .	00.00		
754.0	Minimum	29.69		
971.0	Maximum	38.23		
Coefficien	t of Variation	3.9%		
Symmetry	Veta I Veta II	0.11		
Kurtosis	Veta II	2.88		
Sam	ple Size	582		
	Percentiles			
Millimeters		Inches		
791.6	1st	31.16		
799.8	2nd	31.49		
804.9	3rd	31.69		
811.8	5th	31.96		
822.5	10th	32.38		
829.9	15th	32.67		
835.9	20th	32.91		
841.1	25th	33.12		
845.9	30th	33.31		
850.5	35th	33.48		
854.8	40th	33.66		
859.1	45th	33.82		
863.4 867.8	50th 55th	33.99 34.16		
872.2	ອວເກ 60th	34.16 34.34		
876.9	65th	34.54 34.52		
881.8		34.52 34.72		
887.1				
893.1				
	899.9 85th			
908.4				
920.4				
927.5	97th	36.24 36.52		
932.3				
938.9				

	Males	
Millimete	<u>Inches</u>	
923.3	Mean	36.35
1.3	SE(Mean)	0.05
34.6	StDev	1.36
0.9	SE(StDev)	0.04
810.0	Minimum	31.89
1040.0	Maximum	40.94
	t of Variation	3.7%
Symmetry	Veta I	-0.02
Kurtosis	Veta II	3.09
Sam	ple Size	736
	Percentiles	
Millimeters		Inches
840.1	1st	33.08
850.9	2nd	33.50
857.6	3rd	33.76
866.3	5th	34.11
879.3	10th	34.62
887.9	15th	34.96
894.7	20th	35.22
900.4	25th	35.45
905.6	30th	35.65
910.3	35th	35.84
914.8	40th	36.02
919.2	45th	36.19
923.5	50th	36.36
927.8	55th	36.53
932.2	60th	36.70
936.7	65th	36.88
941.4	70th	37.06
946.6	75th	37.27
952.3	80th	37.49
958.9	85th	37.75
967.2	90th	38.08
979.3	95th	38.55
986.9	97th	38.85
992.3		
1000.6		

(46) Sleeve Length: Spine-Elbow

The horizontal surface distance between the midspine landmark and the olecranon-center landmark on the tip of the raised elbow is measured with a tape. The measurement is made while the subject holds his/her arms up in a horizontal position parallel to the standing surface and joins them by bringing the fists together at the metacarpophalangeal and proximal interphalangeal knuckles. The forearms and fists are in a straight line.





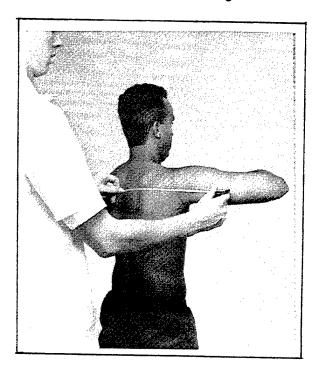
(46) Sleeve Length: Spine-Elbow

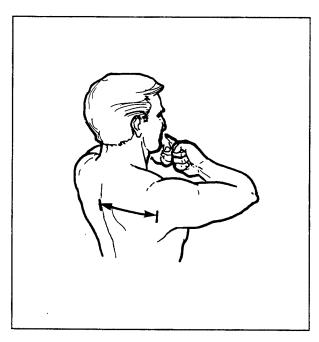
Females				
Millimeter	<u>Inches</u>			
537.2	Mean	21.15		
1.1	SE(Mean)	0.04		
26.0	StDev	1.02		
0.8	SE(StDev)	0.03		
448.0	Minimum	17.64		
615.0	Maximum	24.21		
	of Variation	4.8%		
Symmetry-	Veta I	-0.14		
Kurtosis	-Veta II	3.09		
Samp	ole Size	582		
	Percentiles			
Millimeters		Inches		
471.6	1st	18.57		
481.1	2nd	18.94		
486.6	3rd	19.16		
493.8	5th	19.44		
504.0	10th	19.84		
510.6	15th	20.10		
515.7	20th	20.30		
520.0	25th	20.47		
523.9	30th	20.63		
527.5	35th	20.77		
530.9 534.2	40th	20.90		
537.5	45th 50th	21.03		
540.8	55th	21.16 21.29		
544.1	60th	21.29		
547.6	65th	21. 4 2 21.56		
551.2				
555.2	75th	21.70 21.86		
559.6				
564.6				
570.9	90th	22.23 22.47		
579.5	95th	22.82		
584.7				
588.1				
592.7	99th	23.34		

Males				
Millimeters	<u>Inches</u>			
594.0	94.0 Mean			
1.0	SE(Mean)	23.38 0.04		
28.4	StDev	1.12		
0.7	SE(StDev)	0.03		
484.0	Minimum	19.06		
679.0	Maximum	26.73		
Coefficient	of Variation	4.8%		
Symmetry-	Veta	0.03		
Kurtosis		3.11		
Samp	le Size	738		
	Percentiles			
Millimeters		Inches		
529.2	1st	20.84		
536.9	2nd	21.14		
541.7	3rd	21.33		
548.2	5th	21.58		
558.1	10th	21.97		
564.7	15th	22.23		
570.1	20th	22.44		
574.7	25th	22.62		
578.8	30th	22.79		
582.7	35th	22.94		
586.4	40th	23.08		
589.9	45th	23.23		
593.5	50th	23.37		
597.1	55th	23.51		
600.7	60th	23.65		
604.5	65th	23.80		
608.6	70th	23.96		
612.9	75th	24.13 24.33		
617.9				
623.6	85th	24.55		
630.9	90th	24.84		
641.7	95th	25.26		
648.6	97th	25.54		
653.7	98th	25.73		
661.5	99th	26.04		

(47) Sleeve Length: Spine-Scye

The horizontal surface distance between the midspine landmark and the right posterior-diagonal-scye landmark at the back of the raised right arm near the armpit is measured with a tape. The measurement is made while the subject holds his/her arms up in a horizontal position parallel to the standing surface and joins them by bringing the fists together at the metacarpophalangeal and proximal interphalangeal knuckles. The forearms and fists are in a straight line.





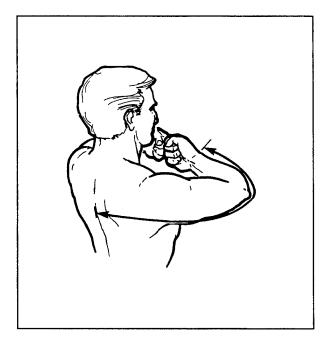
(47) Sleeve Length: Spine-Scye

			1 1			
	Females				Males	
<u>Millimeters</u>	<u> </u>	<u>Inches</u>		Millimete	ers	<u>Inches</u>
209.3	Mean	0 24		227.4	Mana	0.05
		8.24		227.4	Mean	8.95
0.5	SE(Mean)	0.02		0.6	SE(Mean)	0.02
12.9	StDev	0.51		15.1	StDev	0.59
0.4	SE(StDev)	0.01		0.4	SE(StDev)	0.02
175.0	Minimum	6.89		180.0	Minimum	7.09
252.0	Maximum	9.92		275.0	Maximum	10.83
					· · · · · · · · · · · · · · · · · · ·	10.00
	of Variation	6.2%			nt of Variation	6.6%
Symmetry-		0.04		Symmetr	yVeta I	0.05
Kurtosis	Veta II	2.75	:	Kurtosis-	Veta II	2.95
Samp	le Size	582		San	nple Size	738
	Percentiles				Percentiles	
Millimeters		Inches		Millimete		Inches
182.6	1st	7.19		193.1	1st	7.60
184.0	2nd	7.24		197.2	2nd	7.76
185.3	3rd	7.30		199.7	3rd	7.86
187.6	5th	7.39		203.1	5th	8.00
192.0	10th	7.56		208.4	10th	8.20
195.2	15th	7.69		211.9	15th	8.34
197.9	20th	7.79		214.7	20th	8.45
200.3	25th	7.89		217.2	25th	8.55
202.4	30th	7.97		219.4	30th	8.64
204.4	35th	8.05		221.4	35th	8.72
206.2	40th	8.12		223.4	40th	8.80
208.0	45th	8.19		225.3	45th	8.87
209.7	50th	8.25		227.2	50th	8.95
211.4	55th	8.32		229.1	55th	9.02
213.0	60th	8.39		231.1	60th	9.10
214.7	65th	8.45		233.1	65th	9.18
216.5	70th	8.52		235.3	70th	9.26
218.4	75th	8.60		237.6	75th	9.36
220.4	80th	8.68		240.3	80th	9.46
222.8	85th	8.77		243.3	85th	9.58
225.7	90th	8.89		247.2	90th	9.73
230.2	95th	9.06		252.9	95th	9.96
233.4	97th	9.19		256.6	97th	10.10
235.9	98th	9.29		259.3	98th	10.21
240.2	99th	9.46		263.3	99th	10.37

(48) Sleeve Length: Spine-Wrist

The horizontal surface distance from the midspine landmark, across the olecranon-center landmark at the tip of the raised right elbow, to the dorsal wrist landmark is measured with a tape. The measurement is made while the subject holds his/her arms up in a horizontal position parallel to the standing surface and joins them by bringing the fists together at the metacarpophalangeal and proximal interphalangeal knuckles. The forearms and fists are in a straight line.





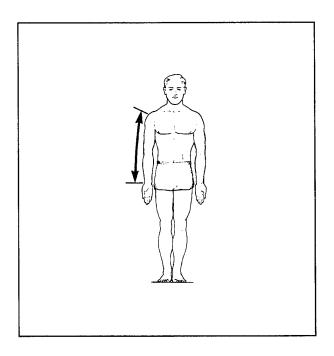
(48) Sleeve Length: Spine-Wrist

			1 1			
	Females				Males	
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>		<u>Millimete</u>	ers	<u>Inches</u>
801.3	Mean	31.55		886.5	Moon	24.00
1.5		0.06			Mean	34.90
37.1	SE(Mean) StDev	1. 4 6		1.4	SE(Mean)	0.06
1.1				38.4	StDev	1.51
1.1	SE(StDev)	0.04		1.0	SE(StDev)	0.04
671.0	Minimum	26.42		731.0	Minimum	28.78
929.0	Maximum	36.57		995.0	Maximum	39.17
1	of Variation	4.6%			nt of Variation	4.3%
Symmetry-		-0.04			yVeta I	0.01
Kurtosis	-Veta II	3.47		Kurtosis-	Veta II	3.03
0	1- 0:	500				
Samp	ole Size	582		San	nple Size	738
A 4:10: 4	Percentiles	1 1			Percentiles	
Millimeters		Inches		Millimete		Inches
707.9	1st	27.87		802.2	1st	31.58
722.5	2nd	28.44		810.5	2nd	31.91
730.8	3rd	28.77		816.1	3rd	32.13
741.2	5th	29.18		824.0	5th	32.44
755.7	10th	29.75		836.9	10th	32.95
764.7	15th	30.11		846.0	15th	33.31
771.6	20th	30.38		853.4	20th	33.60
777.5	25th	30.61		859.8	25th	33.85
782.7	30th	30.82		865.6	30th	34.08
787.5	35th	31.00		871.1	35th	34.29
792.1	40th	31.18	·	876.2	40th	34.50
796.5	45th	31.36		881.3	45th	34.70
801.0	50th	31.53		886.3	50th	34.89
805.5	55th	31.71		891.2	55th	35.09
810.0	60th	31.89		896.3	60th	35.29
814.8	65th	32.08	İ	901.5	65th	35.49
819.9	70th	32.28		907.0	70th	35.71
825.5	75th	32.50		912.9	75th	35.94
831.9	80th	32.75		919.5	80th	36.20
839.3	85th	33.04]	927.1	85th	36.50
848.7	90th	33.41		936.6	90th	36.88
862.5	95th	33.96		950.4	95th	37.42
871.2	97th	34.30		959.2	97th	37.76
877.3	98th	34.54		965.6	98th	38.02
886.3	99th	34.89	ŀ	975.4	99th	38.40

(49) Sleeve Outseam

The straight-line distance between the acromion landmark on the tip of the right shoulder and the stylion landmark on the right wrist is measured with a tape. The subject stands erect with both arms straight at the sides and the palms facing forward.





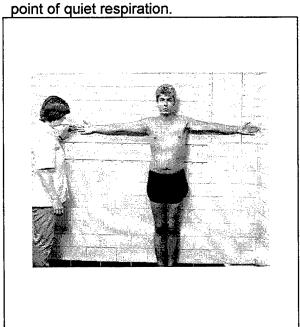
(49) Sleeve Outseam

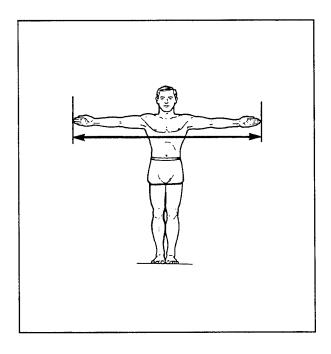
Females				
Millimeters	<u>Inches</u>			
540.7	Mean	21.29		
1.2	SE(Mean)	0.05		
30.1	StDev	1.18		
0.9	SE(StDev)	0.03		
421.0	Minimum	16.57		
641.0	Maximum	25.24		
Coefficient	of Variation	5.6%		
Symmetry-	Veta I	0.10		
Kurtosis	Veta II	3.49		
Samp	le Size	582		
	Percentiles			
Millimeters		Inches		
470.7	1st	18.53		
479.1	2nd	18.86		
484.5	3rd	19.07		
491.7	5th	19.36		
502.7	10th	19.79		
510.1	15th	20.08		
515.8	20th	20.31		
520.7	25th	20.50		
525.1	30th	20.67		
529.1	35th	20.83		
532.9	40th	20.98		
536.6	45th	21.12		
540.2	50th	21.27		
543.8	55th	21.41		
547.5	60th	21.55		
551.3	65th	21.70		
555.3	70th	21.86		
559.7	75th	22.04		
564.8	80th	22.24		
570.7	85th	22.47		
578.5	90th	22.78		
590.8	95th	23.26		
599.4	97th	23.60		
606.1	98th	23.86		
617.4 99th		24.31		

	Males	
<u>Millimeter</u>		<u>Inches</u>
600.2	0.2 Mean	
1.1	SE(Mean)	23.63 0.04
30.0	StDev	1.18
0.8	SE(StDev)	0.03
481.0	Minimum	18.94
693.0	Maximum	27.28
093.0	Maximum	21.20
Coefficient	of Variation	5.0%
Symmetry-		0.08
Kurtosis	-Veta II	3.04
Samp	ole Size	738
	Percentiles	
Millimeters		Inches
538.1	1st	21.18
543.6	2nd	21.40
547.4	3rd	21.55
552.9	5th	21.77
562.1	10th	22.13
568.8	15th	22.39
574.2	20th	22.61
579.1	25th	22.80
583.5	30th	22.97
587.6	35th	23.13
591.6	40th	23.29
595.5	45th	23.44
599.3	50th	23.60
603.2	55th	23.75
607.2	60th	23.91
611.3	65th	24.07
615.7	70th	24.24
620.4	75th	24.42 24.63
625.7		
631.7	85th	24.87
639.4	90th	25.17
650.6	95th	25.61 25.90
657.8		
	662.9 98th	
670.9 99th		26.41

(50) Span

The distance between the tips of the middle fingers of the horizontally outstretched arms is measured on a wall chart. The subject stands erect with his/her back against a wall-mounted scale and with the heels together. Both arms and hands are stretched horizontally against a back wall with the tip of the middle finger of one hand just touching a side wall. A block is placed at the tip of the middle finger of the other hand to establish the measurement on the scale. The measurement is taken at the maximum point of quiet respiration.



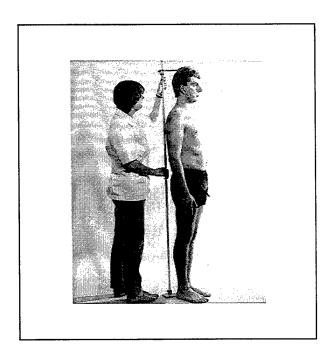


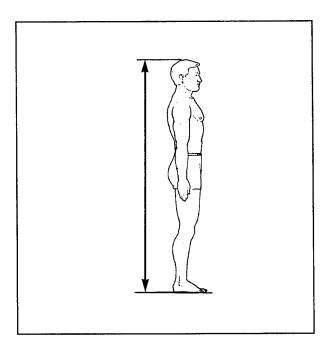
(50) Span

Females					Males	
Millimeters	2	<u>Inches</u>		<u>Millimete</u>	<u>rs</u>	<u>Inches</u>
1654.4	Maan	OF 00		4047.0	N	74.55
1651.1	Mean	65.00		1817.3	Mean	71.55
3.3	SE(Mean)	0.13		2.9	SE(Mean)	0.11
80.1	StDev	3.15		78.0	StDev	3.07
2.4	SE(StDev)	0.09		2.0	SE(StDev)	0.08
1356.0	Minimum	53.39		1474.0	Minimum	58.03
1933.0	Maximum	76.10		2125.0	Maximum	83.66
Coefficient	of Variation	4.8%	:	Coefficien	t of Variation	4.3%
Symmetry-		0.13		Symmetry		0.03
Kurtosis		3.47		Kurtosis		3.37
rantoolo	Jota II	0.17		Raitoolo	vota II	0.07
Samp	le Size	579		Sam	ple Size	732
	Percentiles				Percentiles	
Millimeters		Inches		Millimeter	s	Inches
1468.0	1st	57.79		1646.1	1st	64.81
1491.3	2nd	58.71		1663.5	2nd	65.49
1505.4	3rd	59.27		1675.0	3rd	65.95
1524.0	5th	60.00		1691.2	5th	66.58
1551.8	10th	61.10		1717.4	10th	67.61
1570.3	15th	61.82		1735.7	15th	68.33
1584.8	20th	62.39		1750.5	20th	68.92
1597.4	25th	62.89		1763.6	25th	69.43
1608.8	30th	63.34	•	1775.3	30th	69.90
1619.4	35th	63.75		1786.3	35th	70.33
1629.5	40th	64.15		1796.8	40th	70.74
1639.3	45th	64.54		1807.0	45th	71.14
1649.2	50th	64.93		1817.1	50th	71.54
1659.1	55th	65.32		1827.2	55th	71.94
1669.3	60th	65.72		1837.4	60th	72.34
1679.9	65th	66.14	1	1847.9	65th	72.75
1691.1	70th	66.58		1859.0	70th	73.19
1703.5	75th	67.07		1870.9	75th	73.66
1717.4	80th	67.61		1884.1	80th	74.18
1733.5	85th	68.25		1899.1	85th	74.10 74.77
1754.1	90th	69.06	[1917.6	90th	75.49
1784.5	95th	70.26		1943.7	95th	76.52
1803.9	97th	71.02		1959.6	97th	70.32 77.15
1817.9	98th	71.57		1970.6	98th	77.13 77.58
1839.1	99th	72.40		1986.8	99th	77.30 78.22

(51) Stature

The vertical distance from a standing surface to the top of the head is measured with an anthropometer. The subject stands erect with the head in the Frankfort plane. The heels are together with the weight distributed equally on both feet. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.



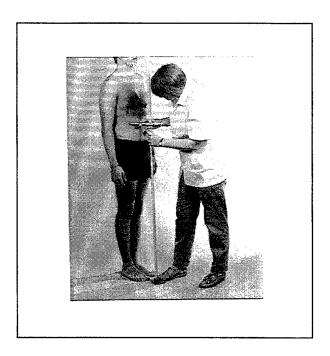


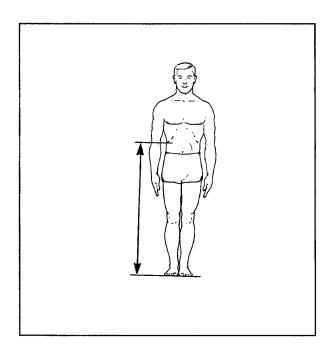
(51) Stature

Females					Melaa	
Hemales Millimeters		Inches		Millimete	Males	lpakaa
Millineter	<u>5</u>	<u>IIICIIES</u>	i	willinete	<u>rs</u>	<u>Inches</u>
1632.8	Mean	64.28		1760.7	Mean	69.32
2.8	SE(Mean)	0.11		2.5	SE(Mean)	0.10
68.5	StDev	2.70		68.6	StDev	2.70
2.0	SE(StDev)	0.08		1.8	SE(StDev)	0.07
	02(0.501)	0.00		1.0	OL(OIDE)	0.07
1428.0	Minimum	56.22		1497.0	Minimum	58.94
1870.0	Maximum	73.62		1955.0	Maximum	76.97
Coefficient	of Variation	4.2%		Coefficier	nt of Variation	3.9%
Symmetry-	Veta I	0.15		Symmetry	/Veta I	-0.03
Kurtosis	-Veta II	3.04		Kurtosis	Veta II	3.04
Samp	ole Size	582		Sam	ple Size	738
	Percentiles				Percentiles	
Millimeters	;	Inches		Millimeter	rs .	Inches
1475.4	1st	58.09		1594.6	1st	62.78
1497.2	2nd	58.94		1617.8	2nd	63.69
1509.8	3rd	59.44		1631.4	3rd	64.23
1525.7	5th	60.07		1648.9	5th	64.92
1548.6	10th	60.97		1674.1	10th	65.91
1563.6	15th	61.56		1690.5	15th	66.56
1575.4	20th	62.02		1703.3	20th	67.06
1585.7	25th	62.43		1714.3	25th	67.49
1595.1	30th	62.80		1724.2	30th	67.88
1603.9	35th	63.14		1733.4	35th	68.24
1612.4	40th	63.48		1742.2	40th	68.59
1620.9	45th	63.81	1	1750.8	45th	68.93
1629.4	50th	64.15		1759.4	50th	69.27
1638.1	55th	64.49		1768.0	55th	69.61
1647.1	60th	64.84	<u>.</u>	1776.9	60th	69.96
1656.5	65th	65.22		1786.1	65th	70.32
1666.7	70th	65.62		1795.9	70th	70.71
1677.8	75th	66.06		1806.6	75th	71.13
1690.5	80th	66.55		1818.7	80th	71.60
1705.2	85th	67.13		1832.6	85th	72.15
1723.9	90th	67.87		1850.2	90th	72.84
1750.7	95th	68.93		1875.5	95th	73.84
1767.0	97th	69.57		1891.0	97th	74.45
1778.1	98th	70.01		1901.7	98th	74.87
1793.6	99th	70.61	J	1917.0	99th	75.47

(52) Tenth Rib Height

The vertical distance between a standing surface and the tenth rib landmark at the bottom of the right side of the rib cage is measured with an anthropometer. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet. The shoulders and upper extremities are relaxed. The measurement is made at the maximum point of quiet respiration.





(52) Tenth Rib Height

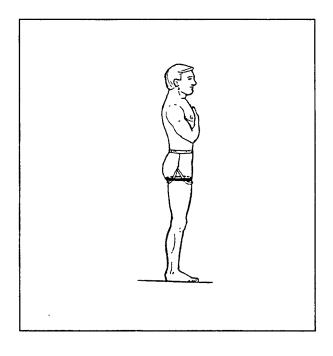
Females			
<u>Millimeter</u>	<u>Inches</u>		
1039.0	Mean	40.90	
2.2	SE(Mean)	0.09	
52.5	StDev	2.07	
1.5	SE(StDev)	0.06	
876.0	Minimum	34.49	
1197.0	Maximum	47.13	
Coefficient	t of Variation	5.1%	
Symmetry-	of Variation Veta I -Veta II	0.14	
Kurtosis	-Veta II	3.09	
Sam	ole Size	582	
	Percentiles		
Millimeters	5	Inches	
912.0	1st	35.91	
932.3	2nd	36.71	
943.5	3rd	37.15	
957.1	5th	37.68	
975.4	10th	38.40	
986.8	15th	38.85	
995.6	20th	39.20	
1003.3	25th	39.50	
1010.2	30th	39.77	
1016.7	35th	40.03	
1023.1	40th	40.28	
1029.4	45th	40.53	
1035.8	50th	40.78	
1042.4	55th	41.04	
1049.3	60th	41.31	
1056.6	65th	41.60	
1064.5	70th	41.91	
1073.2	75th	42.25	
1083.2	80th	42.64	
1094.9	85th	43.11	
1109.7	90th	43.69	
1131.1	95th	44.53	
1143.8	97th	45.03	
1152.3	98th	45.37	
1163.5	99th	45.81	

	Maies	
<u>Millimeter</u>		<u>Inches</u>
1121.0	Mean	44.13
1.9	SE(Mean)	0.08
51.9	StDev	2.04
1.3	SE(StDev)	0.05
227.0		
905.0	Minimum	35.63
1281.0	Maximum	50.43
Coefficient	t of Variation	4.6%
Symmetry		-0.06
Kurtosis		3.15
		55
Sam	ole Size	738
	Percentiles	
Millimeters		Inches
1001.8	1st	39.44
1016.2	2nd	40.01
1025.2	3rd	40.36
1037.1	5th	40.83
1055.4	10th	41.55
1067.7	15th	42.03
1077.4	20th	42.42
1085.9	25th	42.75
1093.6	30th	43.06
1100.7	35th	43.34
1107.6	40th	43.60
1114.2	45th	43.87
1120.8	50th	44.13
1127.4	55th	44.39
1134.2	60th	44.65
1141.2	65th	44.93
1148.6	70th	45.22
1156.6	75th	45.54
1165.6	80th	45.89
1175.9	85th	46.29
1188.7	90th	46.80
1207.1	95th	47.52
1218.4	97th	47.97
1226.3	98th	48.28
1237.8	99th	48.73

(53) Thigh Circumference

The circumference of the right thigh at its juncture with the buttock is measured with a tape. The measurement is made perpendicular to the long axis of the thigh. The subject stands erect with the weight distributed equally on both feet. The legs are spread apart just enough so that the thighs do not touch.





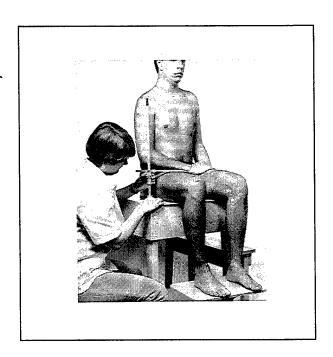
(53) Thigh Circumference

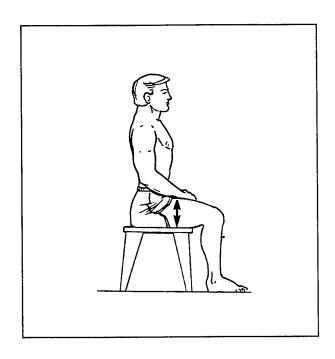
	Females			
Millimeter	Inches			
iniminote13		inones		
580.9	Mean	22.87		
1.9	SE(Mean)	0.08		
46.6	StDev	1.83		
1.4	SE(StDev)	0.05		
	,			
423.0	Minimum	16.65		
726.0	Maximum	28.58		
Coefficien	t of Variation	8.0%		
Symmetry	Veta I	0.25		
Kurtosis	-Veta II	3.17		
Sami	ole Size	582		
	Percentiles			
Millimeters		Inches		
477.6	1st	18.80		
490.4	2nd	19.31		
498.1	3rd	19.61		
508.2	5th	20.01		
523.3	10th	20.60		
533.4	15th	21.00		
541.5	20th	21.32		
548.5	25th	21.60		
554.9	30th	21.85		
561.0	35th	22.09		
566.8	40th	22.31		
572.5	45th	22.54		
578.3	50th	22.77		
584.2	55th	23.00		
590.3	60th	23.24		
596.7 603.6	65th 70th	23.49		
611.2	70th 75th	23.76 24.06		
619.8	75เก 80th	24.06 24.40		
630.1	85th	24.40 24.81		
643.4	90th	25.33		
663.5	95th	26.12		
676.7	97th	26.64		
686.3	98th	27.02		
701.3	99th	27.61		

	Males	
<u>Millimeter</u>		<u>Inches</u>
600.1	Mean	23.63
1.8	SE(Mean)	0.07
49.0	StDev	1.93
1.3	SE(StDev)	0.05
459.0	Minimum	18.07
787.0	Maximum	30.98
Coefficient	of Variation	8.2%
Symmetry-	of Variation Veta I -Veta II	0.03
Kurtosis	-Veta II	2.95
Samp	ole Size	738
	Percentiles	
Millimeters	i	Inches
488.2	1st	19.22
499.7	2nd	19.67
507.5	3rd	19.98
518.4	5th	20.41
536.0	10th	21.10
548.1	15th	21.58
557.9	20th	21.96
566.3	25th	22.30
573.9	30th	22.59
580.9	35th	22.87
587.5	40th	23.13
593.9	45th	23.38
600.2	50th	23.63
606.5	55th	23.88
612.9	60th	24.13
619.4	65th	24.39
626.2	70th	24.65
633.6	75th	24.94
641.8	80th	25.27
651.2	85th	25.64
663.0	90th	26.10
680.4	95th	26.79
691.6	97th	27.23
700.0	98th	27.56
713.2	99th	28.08

(54) Thigh Clearance

The vertical distance between a sitting surface and the highest point on the top of the right thigh is measured with an anthropometer. The subject sits with the thighs parallel, knees flexed 90 degrees, and the feet in line with the thighs.





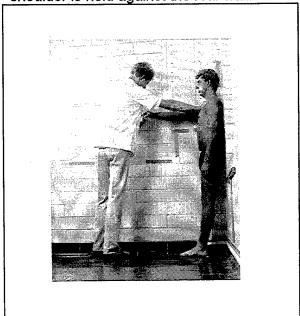
(54) Thigh Clearance

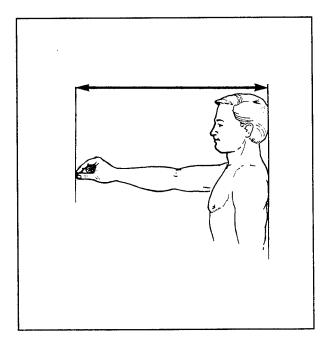
Females			
<u>Millimeters</u>	Inches		
157.4	Mean	6.20	
0.5	SE(Mean)	0.02	
12.2	StDev	0.48	
0.4	SE(StDev)	0.01	
121.0	Minimum	4.76	
206.0	Maximum	8.11	
Coefficient of	of Variation	7.8%	
Symmetry	Veta I	0.37	
Kurtosis\	√eta II	3.32	
		0.02	
	e Size	582	
	Percentiles		
Millimeters		Inches	
132.3	1st	5.21	
134.6	2nd	5.30	
136.2	3rd	5.36	
138.4	5th	5.45	
142.2	10th	5.60	
144.8	15th	5.70	
147.0	20th	5.79	
148.9	25th	5.86	
150.6	30th	5.93	
152.2	35th	5.99	
153.7	40th	6.05	
155.2 156.7	45th	6.11	
156.7	50th 55th	6.17	
150.5		6.23	
161.4	60th	6.29	
163.2	65th 70th	6.36 6.42	
165.2	70th 75th	6.42 6.50	
167.3	75th 80th	6.50 6.59	
169.9	85th	6.69	
173.3	90th	6.82	
178.6	95th	7.03	
182.3	97th	7.03 7.18	
185.1	98th	7.10	
189.8	99th	7.2 3 7.47	

Males			
Millimeters	<u>S</u>	<u>Inches</u>	
168.0	Mean	6.61	
0.5	SE(Mean)	0.02	
12.7	StDev	0.50	
0.3	SE(StDev)	0.01	
131.0	Minimum	5.16	
213.0	Maximum	8.39	
Coefficient	of Variation	7.5%	
Symmetry-		0.29	
Kurtosis	Veta II	3.20	
Samp	le Size	736	
	Percentiles		
Millimeters		Inches	
141.4	1st	5.57	
143.8	2nd	5.66	
145.5	3rd	5.73	
148.0	5th	5.83	
152.1	10th	5.99	
154.9	15th	6.10	
157.2	20th	6.19	
159.2	25th	6.27	
161.1	30th	6.34	
162.8	35th	6.41	
164.4	40th	6.47	
165.9	45th	6.53	
167.5	50th	6.59	
169.1	55th	6.66	
170.7	60th	6.72	
172.3	65th	6.79	
174.1	70th	6.85	
176.0	75th	6.93	
178.2	80th	7.02	
180.8	85th	7.12	
184.2	90th	7.25	
189.5	95th	7.46	
193.2	97th	7.61	
196.1	98th	7.72	
201.0	99th	7.91	

(55) Thumbtip Reach

The horizontal distance from a back wall to the tip of the right thumb is measured on a wall scale. The subject stands erect in a corner looking straight ahead with the feet together and the heels 20 cm from the back wall. The buttocks and shoulders are against the wall. The right arm and hand, palm down, are stretched forward horizontally along a scale on the side wall. The thumb continues the horizontal line of the arm and the index finger curves around to touch the pad at the end of thumb. The subject's right shoulder is held against the rear wall.





(55) Thumbtip Reach

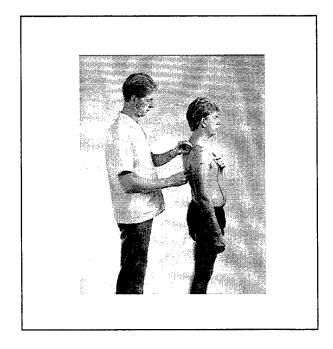
Females			
Millimeter	<u>Inches</u>		
727.4	Mean	28.64	
1.5	SE(Mean)	0.06	
36.8	StDev	1.45	
1.1	SE(StDev)	0.04	
605.0	Minimum	23.82	
847.0	Maximum	33.35	
Coefficient	t of Variation	5.1%	
Symmetry	Veta I	0.16	
Kurtosis		3.37	
Samı	ole Size	580	
	Percentiles		
Millimeters	\$	Inches	
641.2	1st	25.25	
653.9	2nd	25.75	
661.3	3rd	26.03	
670.5	5th	26.40	
683.5	10th	26.91	
691.7	15th	27.23	
698.1	20th	27.48	
703.5	25th	27.70	
708.3	30th	27.89	
712.8	35th	28.06	
717.1	40th	28.23	
721.4	45th	28.40	
725.6	50th	28.57	
729.9	55th	28.74	
734.4	60th	28.91	
739.1	65th	29.10	
744.2	70th	29.30	
749.9	75th	29.52	
756.5	80th	29.78	
764.3	85th	30.09	
774.7	90th	30.50	
790.9	95th	31.14	
801.8 810.1	97th 98th	31.57 31.89	
823.3	96th	31.89	
023.3	ອອເກ	JZ.41	

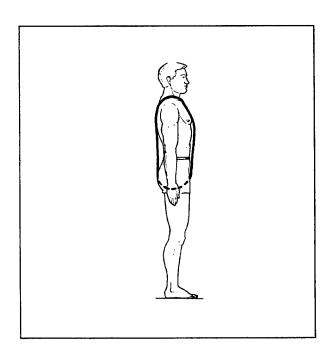
	Males	
Millimete	<u>Inches</u>	
800.3	Mean	31.51
1.4	SE(Mean)	0.05
37.4	StDev	1.47
1.0	SE(StDev)	0.04
662.0	Minimum	26.06
925.0	Maximum	36.42
Coefficier	nt of Variation	4.7%
Symmetry	yVeta I	0.13
Kurtosis-	Veta II	2.97
Sam	ple Size	733
	Percentiles	
Millimeter	S	Inches
727.8	1st	28.65
731.8	2nd	28.81
735.4	3rd	28.95
741.3	5th	29.19
752.3	10th	29.62
760.6	15th	29.94
767.5	20th	30.22
773.7	25th	30.46
779.3	30th	30.68
784.6	35th	30.89
789.7	40th	31.09
794.6	45th	31.28
799.4	50th	31.47
804.3	55th	31.66
809.2	60th	31.86
814.2	65th	32.06
819.5	70th	32.26
825.2	75th	32.49
831.6 838.9	80th	32.74 33.03
848.2	85th 90th	33.03 33.39
862.1	90th 95th	33.39 33.94
871.3	95th 97th	33.94 34.30
878.3	97th 98th	34.50 34.58
889.8	99th	35.03

(56) Vertical Trunk Circumference (USA)*

The vertical circumference of the torso is measured with a tape passing over the maximum protrusion of the right buttock, to the right of the genitalia, over the right bustpoint landmark on women or the nipple (thelion) on men, and across the midshoulder landmark. The subject stands erect looking straight ahead with the right arm hanging relaxed at the side. The heels are together with the weight distributed equally on both feet. The measurement is taken at the maximum point of quiet respiration.

*US Army





(56) Vertical Trunk Circumference (USA)

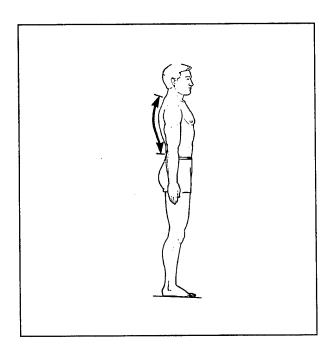
Females			
<u>Millimeters</u>	i	<u>Inches</u>	
1551.1	Mean	61.07	
2.7	SE(Mean)	0.11	
66.1	StDev	2.60	
1.9	SE(StDev)	0.08	
	, ,		
1365.0	Minimum	53.74	
1773.0	Maximum	69.80	
Coefficient	of \/ariation	4.20/	
Symmetry	or variation	4.3%	
Symmetry Kurtosis	veta i	0.23	
Kui tosis	veta ii	3.24	
	e Size	582	
1	Percentiles		
Millimeters		Inches	
1404.3	1st	55.29	
1420.0	2nd	55.91	
1430.4	3rd	56.32	
1445.0	5th	56.89	
1467.8	10th	57.79	
1483.5	15th	58.40	
1495.9	20th	58.89	
1506.6	25th	59.32	
1516.2	30th	59.69	
1525.0	35th	60.04	
1533.4	40th	60.37	
1541.5	45th	60.69	
1549.6	50th	61.01	
1557.6	55th	61.32	
1565.8	60th	61.65	
1574.3	65th	61.98	
1583.4	70th	62.34	
1593.2 1604.5	75th	62.73	
1604.5	80th 85th	63.17	
1635.3	ออเก 90th	63.69 64.38	
1663.0	90th	65.47	
1682.4	95th	66.24	
1697.7	97111 98th	66.84	
1723.6	99th	67.86	

	80-1	
Millimatan	Males	las a la con
<u>Millimeters</u>		<u>Inches</u>
1657.9	Mean	65.27
2.9	SE(Mean)	0.11
79.1	StDev	3.11
2.1	SE(StDev)	0.08
4405.0	A dr	50.40
1425.0	Minimum	56.10
1886.0	Maximum	74.25
Coefficient	of Variation	4.8%
Symmetry-	Veta I	0.14
Kurtosis		2.97
	·•	_,•,
Samp	ole Size	738
Million at a co	Percentiles	11 .
Millimeters		Inches
1476.6	1st	58.13
1501.0	2nd	59.09
1515.4	3rd	59.66
1533.9	5th	60.39
1560.9	10th	61.45
1578.6	15th	62.15
1592.5	20th	62.70
1604.5	25th	63.17
1615.4	30th	63.60
1625.6	35th	64.00
1635.4	40th	64.39
1645.1	45th	64.77
1654.8	50th	65.15
1664.6	55th	65.54
1674.7	60th	65.93
1685.4	65th	66.35
1696.8	70th	66.80
1709.5	75th	67.30
1723.8	80th	67.87
1740.7	85th	68.53
1762.5	90th	69.39
1795.0	95th	70.67
1816.0	97th	71.50
1831.2	98th	72.09
1854.3	99th	73.00

(57) Waist Back Length (Omphalion)

The surface distance between the cervicale landmark at the back of the neck and the posterior-waist (omphalion) landmark at the level of the navel is measured with a tape. The subject stands erect with the head in the Frankfort plane. The shoulders and upper extremities are relaxed. The measurement is taken at the maximum point of quiet respiration.





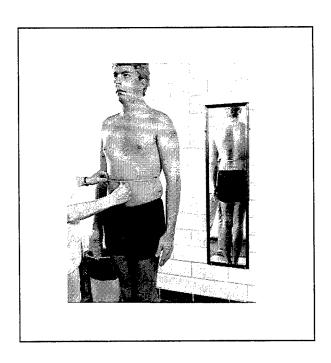
(57) Waist Back Length (Omphalion)

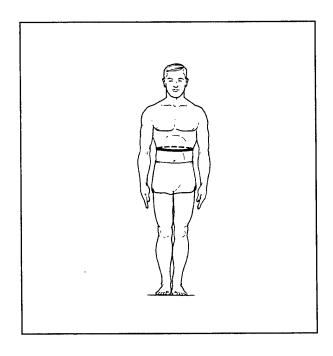
Females		
Females Millimeters		Inches
<u>IIIIIIIII CCCC</u>		
448.5	Mean	17.66
1.0	SE(Mean)	0.04
24.2	StDev	0.95
0.7	SE(StDev)	0.03
374.0	Minimum	14.72
555.0	Maximum	21.85
Coefficie	nt of Variation	5.4%
	yVeta I	0.31
Kurtosis-		3.53
San	nple Size	582
	Percentiles	
Millimete	rs	Inches
395.4	1st	15.57
401.8	2nd	15.82
405.7	3rd	15.97
411.0	5th	16.18
419.0	10th	16.49
424.3	15th	16.71
428.5	20th	16.87
432.2	25th	17.02
435.5	30th	17.15
438.6	35th	17.27
441.5	40 th	17.38
444.4	45th	17.50
447.3	50th	17.61
450.2	55th	17.73
453.2	60th	17.84
456.4	65th	17.97
459.8	70th	18.10
463.5	75th	18.25
467.8	80th	18.42
472.9	85th	18.62
479.6	90th	18.88
490.2	95th	19.30
497.4	97th	19.58
503.0	98th	19.80
512.1	99th	20.16

Males		
<u>Millimeters</u>		<u>Inches</u>
488.4	Mean	19.23
1.0	SE(Mean)	0.04
27.0	StDev	1.06
0.7	SE(StDev)	0.03
395.0	Minimum	15.55
571.0	Maximum	22.48
Coefficie	nt of Variation	5.5%
Symmetr	yVeta I	0.23
Kurtosis-	Veta II	3.27
San	nple Size	738
	Percentiles	
Millimete	_	Inches
430.9	1st	16.96
437.0	2nd	17.20
441.0	3rd	17.36
446.5	5th	17.58
455.2	10th	17.92
461.2	15th	18.16
465.9	20th	18.34
470.1	25th	18.51
473.8	30th	18.65
477.3	35th	18.79
480.6	40th	18.92
483.8	45th	19.05
487.1 490.3	50th	19.18
490.3	55th 60th	19.30
493.7	65th	19.44 19.58
501.0	70th	19.56
505.2	75th	19.72
510.0	80th	20.08
515.7	85th	20.00
523.3	90th	20.60
535.4	95th	21.08
544.0	97th	21.42
550.7	98th	21.68
562.0	99th	22.12

(58) Waist Circumference (Natural Indentation)

The horizontal circumference of the waist at the level of its natural indentation is measured with a tape passing over right and left waist (natural indentation) landmarks. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet. The measurement is made at the maximum point of quiet respiration.





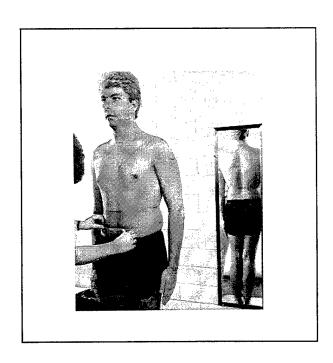
(58) Waist Circumference (Natural Indentation)

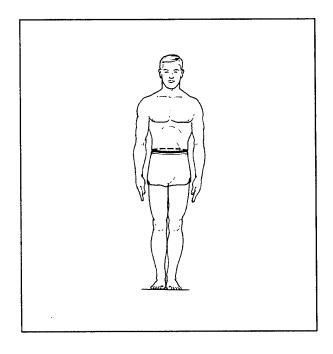
Females		
<u>Millimeters</u>		<u>Inches</u>
733.8	Mean	28.89
2.8	SE(Mean)	0.11
67.9	StDev	2.67
2.0	SE(StDev)	0.08
	Minimum	22.56
1008.0	Maximum	39.68
Coefficient	of Variation	9.3%
Symmetry-	Veta I	0.67
Kurtosis	Veta II	3.51
Samp	le Size	582
	Percentiles	
Millimeters		Inches
602.6	1st	23.73
618.2	2nd	24.34
627.1	3rd	24.69
638.4	5th	25.14
655.2	10th	25.80
666.7	15th	26.25
676.3	20th	26.62
684.9	25th	26.96
693.0	30th	27.28
700.9	35th	27.59
708.7	40th	27.90
716.7	45th	28.21
724.9	50th	28.54
733.4	55th	28.88
742.5	60th	29.23
752.2	65th	29.61
762.8	70th	30.03
774.8	75th	30.50
788.7	80th	31.05
805.4 827.3	85th	31.71
860.4	90th	32.57
881.8	95th	33.87
897.3	97th 98th	34.72
1		35.33 36.24
920.5	99th	36.24

	Males	
<u>Millimeters</u>		<u>Inches</u>
868.2	Mean	34.18
2.8	SE(Mean)	0.11
75.6	StDev	2.98
2.0	SE(StDev)	0.08
682.0	Minimum	26.85
1103.0	Maximum	43.43
Coefficient	of Variation	8.7%
Symmetry-	Veta I	0.22
Kurtosis	-Veta II	2.69
Samp	ole Size	738
	Percentiles	
Millimeters		Inches
715.0	1st	28.15
728.1	2nd	28.67
737.1	3rd	29.02
750.1	5th	29.53
772.0	10th	30.39
787.9	15th	31.02
801.2	20th	31.54
813.2	25th	32.01
824.2	30th	32.45
834.6	35th	32.86
844.7	40th	33.26
854.6	45th	33.65
864.6	50th	34.04
874.8	55th	34.44
885.1	60th	34.85
895.9	65th	35.27
907.4	70th	35.73
919.9	75th	36.22
933.9	80th	36.77
950.0	85th	37.40
970.2	90th	38.20
999.1	95th	39.33
1016.8	97th	40.03
1029.2	98th	40.52
1047.2	99th	41.23

(59) Waist Circumference (Omphalion)

The horizontal circumference of the waist at the level of the center of the navel (omphalion) is measured with a tape. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet. The measurement is made at the maximum point of quiet respiration.





(59) Waist Circumference (Omphalion)

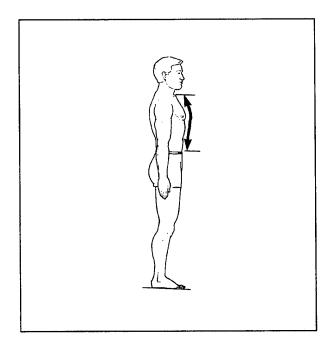
Females		
<u>Millimeters</u>		<u>Inches</u>
808.3	Mean	31.82
3.7	SE(Mean)	0.14
88.6	StDev	3.49
2.6	SE(StDev)	0.10
632.0	Minimum	24.88
1099.0	Maximum	43.27
Coefficient	t of Variation	11.0%
Symmetry-	Veta I Veta II	0.53
Kurtosis	-Veta II	2.91
Sam	ole Size	582
	Percentiles	
Millimeters		Inches
650.3	1st	25.60
661.1	2nd	26.03
668.8	3rd	26.33
680.2	5th	26.78
700.5	10th	27.58
716.1	15th	28.19
729.5	20th	28.72
741.9		29.21
753.6	30th	29.67
764.9	35th	30.11
776.0	40th	30.55
787.1	45th	30.99
798.5	50th	31.44
810.3	55th	31.90
822.4	60th	32.38
835.4	65th	32.89
849.4	70th	33.44
864.9	75th	34.05
882.6	80th	34.75
903.5	85th	35.57
930.5	90th	36.63
970.9	95th	38.22
997.0	97th	39.25
1016.0	98th	40.00
1045.1	99th	41.15

	Males		
Millimeters		<u>Inches</u>	
896.7	Mean	35.30	
3.2	SE(Mean)	0.13	
86.7	StDev	3.41	
2.3	SE(StDev)	0.09	
	(,	•	
679.0	Minimum	26.73	
1185.0	Maximum	46.65	
]			
	nt of Variation	9.7%	
	/Veta I	0.19	
Kurtosis	Veta II	2.70	
Sam	ıple Size	738	
	Percentiles		
Millimeter		Inches	
717.1	1st	28.23	
733.2	2nd	28.87	
744.1	3rd	29.30	
759.8	5th	29.91	
785.9	10th	30.94	
804.7	15th	31.68	
820.4	20th	32.30	
834.3	25th	32.85	
847.1	30th	33.35	
859.2	35th	33.83	
870.9	40th	34.29	
882.3	45th	34.74	
893.8	50th	35.19	
905.4 917.2	55th 60th	35.64 36.44	
917.2	65th	36.11 36.59	
942.5	70th	36.59 37.11	
956.6	75th	37.11 37.66	
972.3	80th	38.28	
990.3	85th	38.99	
1012.7	90th	39.87	
1044.4	95th	41.12	
1063.6	97th	41.87	
1076.9	98th	42.40	
1096.0	99th	43.15	

(60) Waist Front Length (Omphalion)

The surface distance between the anterior-neck landmark and the center of the navel (omphalion) is measured with a tape. The subject stands erect with the head in the Frankfort plane. The measurement is made at the maximum point of quiet respiration.





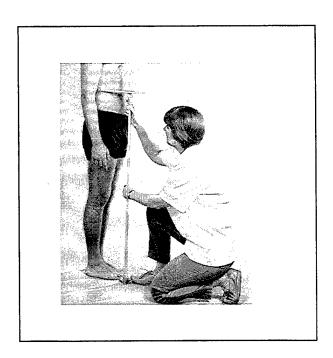
(60) Waist Front Length (Omphalion)

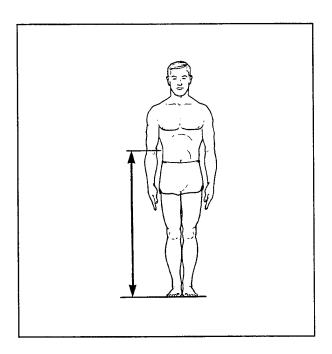
Females		
<u>Millimeters</u>		<u>Inches</u>
396.3	Mean	15.60
0.9	SE(Mean)	0.04
22.2	StDev	0.87
0.7	SE(StDev)	0.03
344.0	Minimum	13.54
481.0	Maximum	18.94
Coefficient	of Variation	5.6%
Symmetry-	Veta I	0.36
Kurtosis	Veta II	3.37
Samp	le Size	582
l.	Percentiles	
Millimeters		Inches
348.6	1st	13.72
353.2	2nd	13.91
356.4	3rd	14.03
361.0	5th	14.21
368.4	10th	14.50
373.5	15th	14.71
377.6	20th	14.87
381.2	25th	15.01
384.3	30th	15.13
387.2	35th	15.25
390.0	40th	15.35
392.7	45th	15.46
395.4	50th	15.57
398.0	55th	15.67
400.8	60th	15.78
403.6	65th	15.89
406.7	70th	16.01
410.0	75th	16.14
413.9	80th	16.29
418.5	85th	16.48
424.8	90th	16.72
435.1	95th	17.13
442.6	97th	17.43
448.7	98th	17.66
459.3	99th	18.08

	Males	
Millimeters		<u>Inches</u>
423.0	Mean	16.65
0.9	SE(Mean)	0.04
25.3	StDev	0.99
0.7	SE(StDev)	0.03
340.0	Minimum	13.39
521.0	Maximum	20.51
 Coefficient	of Variation	6.0%
	Veta I	
Kurtosis	Veta II	3.25
Samp	le Size	738
	Percentiles	
Millimeters		Inches
365.4	1st	14.38
373.0	2nd	14.69
377.5	3rd	14.86
383.4	5th	15.09
391.9	10th	15.43
397.5	15th	15.65
401.9	20th	15.82
405.7	25th	15.97
409.2	30th	16.11
412.4	35th	16.24
415.5	40th	16.36
418.6	45th	16.48
421.6	50th	16.60
424.8	55th	16.72
428.0	60th	16.85
431.4	65th	16.98
435.0	70th	17.13
439.1	75th	17.29
443.7	80th	17.47
449.1	85th	17.68
456.1	90th	17.96
466.7	95th	18.37
473.6	97th	18.65
478.6	98th	18.84
486.4	99th	19.15

(61) Waist Height (Natural Indentation)

The vertical distance between a standing surface and the landmark at the natural indentation of the right waist is measured with an anthropometer. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet. The shoulders and upper extremities are relaxed. The measurement is made at the maximum point of quiet respiration.





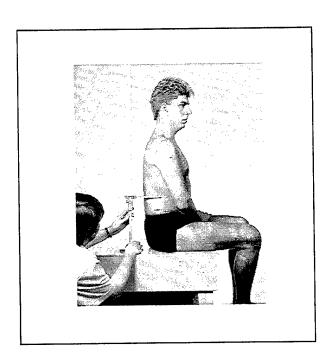
(61) Waist Height (Natural Indentation)

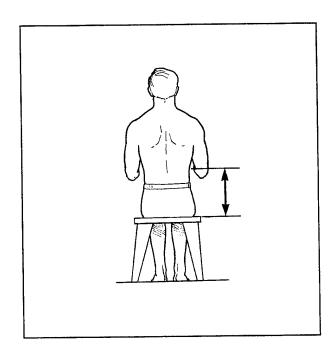
	Females	
<u>Millimete</u>	<u>'S</u>	<u>Inches</u>
1051.2	Mean	41.38
2.3	SE(Mean)	0.09
55.2	StDev	2.17
1.6	SE(StDev)	0.06
863.0	Minimum	33.98
1222.0	Maximum	48.11
Coefficient of Variation		5.3%
SymmetryVeta I		0.13
Kurtosis	-Veta II	3.11
Sam	ole Size	582
	Percentiles	
Millimeters	3	Inches
920.6	1st	36.25
940.8	2nd	37.04
952.0	3rd	37.48
965.7	5th	38.02
984.6	10th	38.76
996.6	15th	39.23
1005.8	20th	39.60
1013.9	25th	39.92
1021.2	30th	40.20
1028.1	35th	40.47
1034.7	40th	40.74
1041.3	45th	41.00
1048.1	50th	41.26
1054.9	55th	41.53
1062.1	60th	41.81
1069.6	65th	42.11
1077.8	70th	42.43
1086.8	75th	42.79
1097.1	80th	43.19
1109.2 1124.6	85th	43.67
1146.8	90th 95th	44.28 45.15
1160.3	95th 97th	45.15 45.68
1169.4	97th 98th	45.66 46.04
1181.9	99th	· ·
1181.9	99th	46.53

	Males	
Millimeters		Inches
	-	
1126.7	Mean	44.36
1.9	SE(Mean)	0.08
52.4	StDev	2.06
1.4	SE(StDev)	0.05
917.0	Minimum	36.10
1280.0	Maximum	50.39
Coefficient	of Variation	4.6%
Symmetry-		-0.03
Kurtosis		2.97
Samp	le Size	738
	Percentiles	
Millimeters		Inches
1007.5	1st	39.66
1020.7	2nd	40.18
1029.1	3rd	40.52
1040.7	5th	40.97
1058.9	10th	41.69
1071.5	15th	42.18
1081.5	20th	42.58
1090.3	25th	42.93
1098.3	30th	43.24
1105.6	35th	43.53
1112.7	40th	43.81
1119.5	45th	44.08
1126.3	50th	44.34
1133.2	55th	44.61
1140.1	60th	44.88
1147.2	65th	45.17
1154.7	70th	45.46
1162.8	75th	45.78
1171.9	80th	46.14
1182.2	85th	46.54
1195.0 1213.2	90th	47.05
1213.2	95th	47.76 48.20
1232.1	97th	48.20
1	98th	48.51 48.96
1243.5	99th	48.96

(62) Waist Height, Sitting (Natural Indentation)

The vertical distance from a sitting surface to the landmark at the natural indentation of the right waist is measured with an anthropometer. The subject sits erect looking straight ahead. The knees are flexed 90 degrees. The measurement is made at the maximum point of quiet respiration.



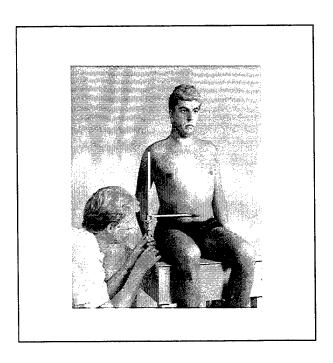


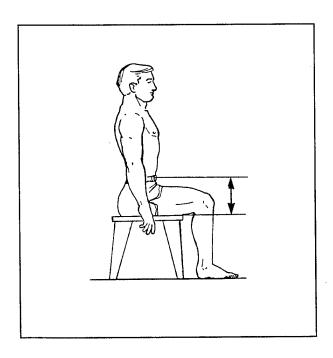
(62) Waist Height, Sitting (Natural Indentation)

	Females				Males	
Millimeter		<u>Inches</u>		Millimeters		<u>Inches</u>
	<u> </u>	11101100		10000	<u>,10</u>	<u>IIIOIIC3</u>
283.0	Mean	11.14		290.7	Mean	11.44
0.9	SE(Mean)	0.04		0.6	SE(Mean)	0.02
21.6	StDev	0.85		16.7	StDev	0.66
0.6	SE(StDev)	0.02		0.4	SE(StDev)	0.02
	,				0_(0.201)	0.02
208.0	Minimum	8.19		241.0	Minimum	9.49
344.0	Maximum	13.54		345.0	Maximum	13.58
j						
Coefficient	of Variation	7.6%		Coefficient of Variation		5.8%
Symmetry-	Veta I	-0.13			yVeta I	0.08
Kurtosis		2.82		Kurtosis-		3.08
Samp	ole Size	582		San	nple Size	736
	Percentiles				Percentiles	
Millimeters	;	Inches		Millimete	rs	Inches
232.0	1st	9.13		251.8	1st	9.91
237.8	2nd	9.36		256.3	2nd	10.09
241.5	3rd	9.51		259.2	3rd	10.21
246.6	5th	9.71		263.2	5th	10.36
254.7	10th	10.03		269.4	10th	10.60
260.2	15th	10.24		273.5	15th	10.77
264.5	20th	10.42		276.7	20th	10.90
268.3	25th	10.56		279.5	25th	11.00
271.7	30th	10.70		282.0	30th	11.10
274.8	35th	10.82		284.3	35th	11.19
277.8	40th	10.94		286.4	40th	11.28
280.7	45th	11.05		288.5	45th	11.36
283.5	50th	11.16		290.6	50th	11.44
286.3	55th	11.27		292.6	55th	11.52
289.1	60th	11.38	·	294.7	60th	11.60
292.0	65th	11.50		296.8	65th	11.69
295.0	70th	11.61		299.1	70th	11.78
298.3	75th	11.74		301.6	75th	11.87
301.8	80th	11.88		304.4	80th	11.98
305.9	85th	12.04		307.7	85th	12.11
310.9	90th	12.24		312.0	90th	12.28
318.0	95th	12.52		318.7	95th	12.55
322.4	97th	12.69		323.4	97th	12.73
325.5	98th	12.81		327.0	98th	12.87
330.1	99th	13.00]	333.0	99th	13.11

(63) Waist Height, Sitting (Omphalion)

The vertical distance from a sitting surface to the center of the navel (omphalion) is measured with an anthropometer. The subject sits erect looking straight ahead. The knees are flexed 90 degrees. The measurement is made at the maximum point of quiet respiration.





(63) Waist Height, Sitting (Omphalion)

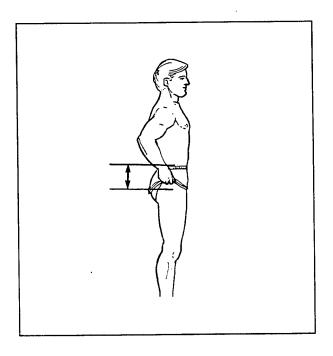
,					
	Millingatous	Females	I I		
	Millimeters	2	<u>Inches</u>		<u>Mil</u>
	231.8	Mean	9.12		234
	0.6	SE(Mean)	0.02		lo
	14.1	StDev	0.56		15
	0.4	SE(StDev)	0.02		(
	400.0	N. A. Commission of the Commis	7.40		4.0-
	190.0	Minimum	7.48		187
	275.0	Maximum	10.83		281
	Coefficient	of Variation	6.1%		Co
	Symmetry-	Veta I	0.03		Syr
	Kurtosis	Veta II	3.10		Kur
	Samp	le Size	582		
	<u> </u>	Percentiles			
	Millimeters		Inches		Mill
	197.8	1st	7.79		198
	202.3	2nd	7.97		202
	205.1	3rd	8.07		205
	208.7	5th	8.22		209
	214.0	10th	8.43		214
	217.5	15th	8.56		218
	220.2	20th	8.67		221
	222.5	25th	8.76		223
	224.5	30th	8.84		226
	226.4	35th	8.91		228
	228.2	40th	8.98		230
	229.9	45th	9.05		232
	231.6	50th	9.12		234
	233.4	55th	9.19		236
	235.1	60th	9.26		238
	236.9	65th	9.33		240
	238.8	70th	9.40		243
	241.0	75th	9.49		245
	243.3	80th	9.58		248
	246.1	85th	9.69		25
	249.7	90th	9.83		255
	255.2	95th	10.05		26
	258.8	97th	10.19		264
	261.6	98th	10.30		267
	265.9	99th	10.47		270
				i	

	Males	
<u>Millimeter</u>	<u>s</u>	<u>Inches</u>
234.7	Mean	9.24
0.6	SE(Mean)	0.02
15.9	StDev	0.63
0.4	SE(StDev)	0.02
187.0	Minimum	7.36
281.0	Maximum	11.06
Coefficient of Variation		6.8%
Symmetry-		0.00
Kurtosis	-Veta II	2.84
Samp	ole Size	736
	Percentiles	
Millimeters		Inches
198.2	1st	7.80
202.7	2nd	7.98
205.4	3rd	8.09
209.1	5th	8.23
214.6	10th	8.45
218.3	15th	8.59
221.2	20th	8.71
223.8	25th	8.81
226.1	30th	8.90
228.3	35th	8.99
230.4	40th	9.07
232.4	45th	9.15
234.4	50th	9.23
236.5 238.5	55th	9.31
240.7	60th	9.39
240.7	65th 70th	9.48
245.0 245.5	75th	9.57
248.4	80th	9.67
251.6	85th	9.78 9.91
251.6	90th	10.06
261.4	95th	10.00
264.9	97th	10.29
267.4	98th	10.43
270.8	99th	10.66

(64) Waist-Hip Length

The surface distance between the right waist (omphalion) landmark and the right lateral-buttock-point landmark on the side of the hip is measured with a tape. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet.





(64) Waist-Hip Length

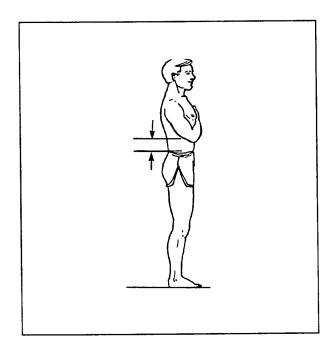
Females Millimeters Inc	
	hes
153.8 Mean 6	.06
0.9 SE(Mean) 0	
ì · · · · ·	.84
0.6 SE(StDev) 0	.02
99.0 Minimum 3	.90
214.0 Maximum 8	.42
Coefficient of Variation 13.	.9%
SymmetryVeta I -0	.00
KurtosisVeta II 2.	.58
Sample Size 582	
Percentiles	
Millimeters Inche	es
107.5 1st 4.2	23
111.0 2nd 4.3	37
113.6 3rd 4.4	17
117.8 5th 4.6	64
125.1 10th 4.9	
130.5 15th 5.1	
134.8 20th 5.3	
138.7 25th 5.4	
142.2 30th 5.6	
145.4 35th 5.7	
148.4 40th 5.8	
151.4 45th 5.9	
154.2 50th 6.0	
157.1 55th 6.1	
159.9 60th 6.3	
162.8 65th 6.4	
165.8 70th 6.5	
169.0 75th 6.6	
172.5 80th 6.7	
176.5 85th 6.9 181.3 90th 7.7	
181.3 90th 7.7 188.2 95th 7.4	
192.5 95th 7.4	
195.7 98th 7.5	
200.7 99th 7.9	

Millimeters Inches 177.0 Mean 6.97 0.8 SE(Mean) 0.03 21.0 StDev 0.83 0.5 SE(StDev) 0.02 120.0 Minimum 4.72 241.0 Maximum 9.49 Coefficient of Variation 11.8% SymmetryVeta I -0.03 KurtosisVeta II 2.87	
0.8 SE(Mean) 0.03 21.0 StDev 0.83 0.5 SE(StDev) 0.02 120.0 Minimum 4.72 241.0 Maximum 9.49 Coefficient of Variation 11.8% SymmetryVeta I -0.03	
21.0 StDev 0.83 0.5 SE(StDev) 0.02 120.0 Minimum 4.72 241.0 Maximum 9.49 Coefficient of Variation 11.8% SymmetryVeta I -0.03	
21.0 StDev 0.83 0.5 SE(StDev) 0.02 120.0 Minimum 4.72 241.0 Maximum 9.49 Coefficient of Variation 11.8% SymmetryVeta I -0.03	
120.0 Minimum 4.72 241.0 Maximum 9.49 Coefficient of Variation 11.8% SymmetryVeta I -0.03	
241.0 Maximum 9.49 Coefficient of Variation 11.8% SymmetryVeta I -0.03	
Coefficient of Variation 11.8% SymmetryVeta I -0.03	
SymmetryVeta I -0.03	
KurtosisVeta II 2 87	
2.07	
Sample Size 738	
Percentiles	
Millimeters Inches	1
125.4 1st 4.94	
132.7 2nd 5.22	
137.0 3rd 5.39	
142.5 5th 5.61	
150.4 10th 5.92	
155.6 15th 6.12	
159.6 20th 6.28	ı
163.0 25th 6.42	1
166.1 30th 6.54	
168.9 35th 6.65	
171.6 40th 6.76	1
174.3 45th 6.86	
176.9 50th 6.97	
179.6 55th 7.07 182.3 60th 7.18	
185.1 65th 7.29 188.1 70th 7.40	
194.9 80th 7.67 199.1 85th 7.84	
204.3 90th 8.04	
211.6 95th 8.33	
216.0 97th 8.50	
219.0 98th 8.62	
223.1 99th 8.78	

(65) Waist (Natural Indentation)-Waist (Omphalion) Length

The surface distance between the right waist (natural indentation) and right waist (omphalion) landmarks is measured with a tape. The subject stands erect looking straight ahead. The heels are together with the weight distributed equally on both feet.





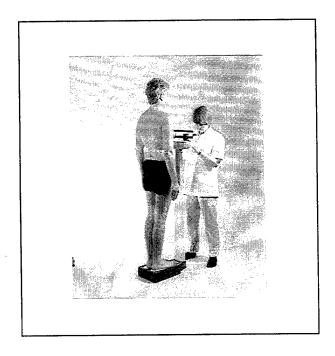
(65) Waist (Natural Indentation)-Waist (Omphalion) Length

	Females	
<u>Millimeter</u>	<u>rs</u>	<u>Inches</u>
75.5	Mean	2.97
0.9	SE(Mean)	0.04
22.6	StDev	0.89
0.7	SE(StDev)	0.03
7.0	Minimum	0.28
149.0	Maximum	5.75
Coefficient of Variation		30.0%
SymmetryVeta I		0.22
Kurtosis		3.05
Sam	ple Size	582
	Percentiles	
Millimeters	8	Inches
22.5	1st	0.89
30.7	2nd	1.21
35.2	3rd	1.39
40.7	5th	1.60
48.3	10th	1.90
53.1	15th	2.09
56.9	20th	2.24
60.1	25th	2.37
63.1	30th	2.48
65.9	35th	2.59
68.6	40th	2.70
71.3	45th	2.81
74.1	50th	2.92
77.0	55th	3.03
79.9	60th	3.15
83.0	65th	3.27
86.4	70th	3.40
90.2	75th	3.55
94.5	80th	3.72
99.5	85th	3.92
105.9	90th	4.17
115.2	95th	4.53
120.7	97th	4.75
124.5 129.5	98th	4.90
129.5	99th	5.10

	Males	
Millimeter		<u>Inches</u>
72.8	Mean	2.87
0.7	SE(Mean)	0.03
20.2	StDev	0.80
0.5	SE(StDev)	0.02
	(=:==;	0.02
7.0	Minimum	0.28
142.0	Maximum	5.59
 Coefficien	t of Variation	27.8%
	Veta I	0.18
Kurtosis	Veta II	2.97
Sam	ple Size	738
	Percentiles	
Millimeters		Inches
27.9	1st	1.10
33.3	2nd	1.31
36.6	3rd	1.44
41.0	5th	1.61
47.5	10th	1.87
52.0	15th	2.05
55.5	20th	2.19
58.7	25th	2.31
61.5	30th	2.42
64.2	35th	2.53
66.7	40th	2.63
69.3	45th	2.73
71.8	50th	2.83
74.4	55th	2.93
77.1	60th	3.03
79.9	65th	3.14
82.8 86.1	70th	3.26
89.8	75th 80th	3.39 3.54
94.1	85th	3.5 4 3.70
99.5	90th	3.70 3.92
107.4	90th 95th	3.92 4.23
112.3	97th	4.23 4.42
115.8	98th	4.56
120.9	99th	4.56 4.76

(66) Weight

The weight of the subject is taken to the nearest tenth of a kilogram. The subject stands on the platform of a scale.



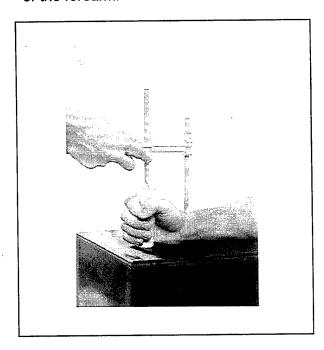
(66) Weight

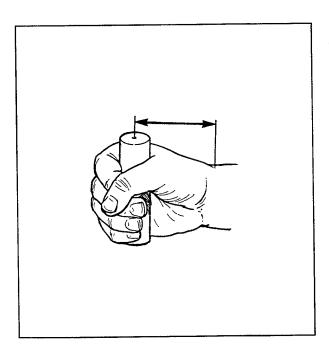
	Females		
<u>Kilograms</u>		<u>Pounds</u>	
62.5	Mean	137.65	
0.3	SE(Mean)	0.79	
8.7	StDev	19.32	
0.2	SE(StDev)	0.57	
38.9	Minimum	85.58	
96.7	Maximum	212.74	
Coefficient	Coefficient of Variation 1.4		
Symmetry	Veta I	0.05	
Kurtosis	veta II	0.36	
T Cartoolo	vota II	0.50	
Sampl	e Size	582	
120	Percentiles		
Kilograms		Pounds	
44.3	1st	97.57	
46.5	2nd	102.49	
47.9	3rd	105.44	
49.6	5th	109.25	
52.2	10th	114.91	
53.9	15th	118.67	
55.3	20th	121.66	
56.5	25th	124.32	
57.6	30th	126.74	
58.6	35th	129.03	
59.6	40th	131.25	
60.6	45th	133.47	
61.7	50th	135.74	
62.7	55th	138.07	
63.8	60th	140.40	
65.0	65th	143.08	
66.3	70th	145.90	
67.7	75th	149.07	
69.4	80th	152.76	
71.4	85th	157.21	
74.1	90th	163.15	
78.4	95th	172.50	
81.3	97th	178.90	
83.5	98th	183.79	
87.1	99th	191.66	

<u>Kilograms</u>	Males <u>F</u>	Pounds
80.6	Mean	177.32
0.4	SE(Mean)	0.88
11.5	StDev	25.30
0.3	SE(StDev)	0.66
52.9	Minimum	116.38
116.9	Maximum	257.18
	TTT CALL TO THE	207.10
Coefficient	of Variation	1.4%
Symmetry	Veta I	0.03
Kurtosis	Veta II	0.28
Samp	le Size	738
	Percentiles	
Kilograms		Pounds
56.4	1st	124.12
59.2	2nd	130.26
60.8	3rd	133.94
63.0	5th	138.80
66.4	10th	146.19
68.7	15th	151.27
70.6	20th	155.45
72.3	25th	159.17
73.9	30th	162.60
75.4	35th	165.88
76.8	40th	169.09
78.3	45th	172.26
79.7	50th	175.52
81.2	55th	178.82
82.8	60th	182.24
84.4	65th	185.88
86.2	70th	189.79
88.2	75th	194.08
90.4	80th	198.97
93.0	85th	204.69
96.3	90th	211.92
101.0	95th	222.38
103.9	97th	228.78
106.0	98th	233.20
108.8	99th	239.43

(67) Wrist-Center of Grip Length

The horizontal distance between the stylion landmark on the right wrist and the center of a dowel (1-1/4" diameter) gripped in the right hand is measured with a Poech caliper. The subject sits grasping a dowel in the right hand. The base of the dowel is flush with the bottom of the fist. The subject puts the bottom of the fist on a flat surface in such a way that the base of the dowel rests on the surface. The fist is in line with the long axis of the forearm.





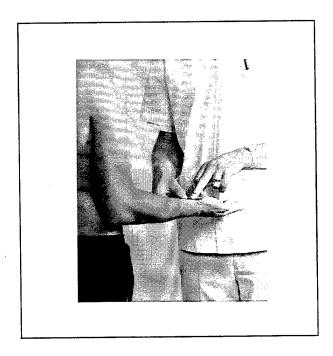
(67) Wrist-Center of Grip Length

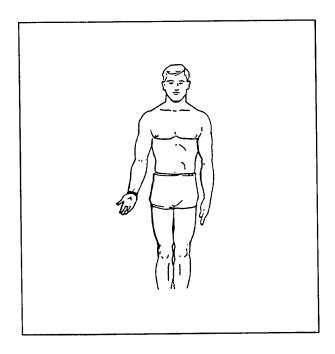
	Females	
<u>Millimeter</u>		Inches
<u> minimeter</u>	<u>3</u>	<u>inches</u>
65.9	Mean	2.59
0.2	SE(Mean)	0.01
5.1	StDev	0.20
0.1	SE(StDev)	0.01
	, ,	
53.0	Minimum	2.09
81.0	Maximum	3.19
	of Variation	
	Veta I	0.32
Kurtosis	-Veta II	2.83
Samr	ole Size	582
	Percentiles	002
Millimeters		Inches
55.5	1st	2.18
56.6	2nd	2.23
57.2	3rd	2.25
58.2	5th	2.29
59.6	10th	2.35
60.7	15th	2.39
61.5	20th	2.42
62.2	25th	2.45
62.9	30th	2.48
63.6	35th	2.50
64.2	40th	2.53
64.9	45th	2.55
65.5	50th	2.58
66.2	55th	2.61
66.8	60th	2.63
67.6	65th	2.66
68.3	70th	2.69
69.2	75th	2.72
70.2	80th	2.76
71.3	85th	2.81
72.8 74.9	90th	2.86
74.9 76.3	95th 97th	2.95 3.00
77.3	97th 98th	3.00 3.04
78.8	90th	3.0 4 3.10
1.0.0	99H1	5.10

_	Males	
Millimeters	<u> </u>	<u>Inches</u>
69.8	Mean	2.75
0.2	SE(Mean)	0.01
4.8	StDev	0.19
0.1	SE(StDev)	0.00
57.0	Minimum	2.24
85.0	Maximum	3.35
	of Variation	6.9%
Symmetry-		0.27
Kurtosis	Veta II	2.75
Samp	le Size	737
	Percentiles	
Millimeters		Inches
59.8	1st	2.36
60.9	2nd	2.40
61.5	3rd	2.42
62.4	5th	2.46
63.8	10th	2.51
64.8	15th	2.55
65.6	20th	2.58
66.3	25th	2.61
67.0	30th	2.64
67.7	35th	2.66
68.3	40th	2.69
68.9	45th	2.71
69.5	50th	2.74
70.2	55th	2.76
70.8	60th	2.79
71.5	65th	2.82
72.3	70th	2.85
73.1	75th	2.88
74.0	80th	2.91
75.1	85th	2.96
76.4	90th	3.01
78.3	95th	3.08
79.5	97th	3.13
80.3	98th	3.16
81.4	99th	3.20

(68) Wrist Circumference

The circumference of the wrist perpendicular to the long axis of the forearm is measured with a tape passing over the stylion landmark on the wrist. The subject extends the right arm forward with the palm up.





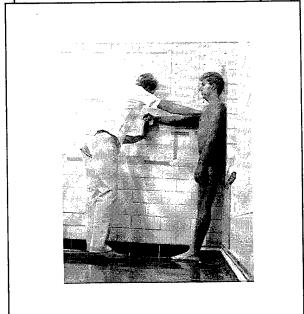
(68) Wrist Circumference

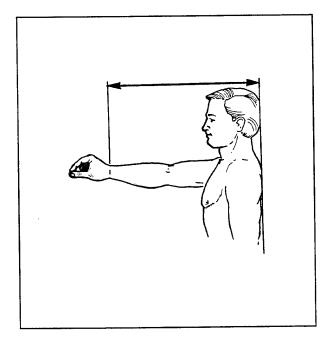
Females										
Millimeters Inches										
151.0	Mean	5.04								
0.3		5.94								
7.0	SE(Mean) StDev	0.01								
0.2		0.27								
0.2	SE(StDev)	0.01								
130.0	Minimum	5.12								
180.0	Maximum	7.09								
Coofficien	t of Variation	4 60/								
Coemicien	Vote	4.6%								
Kurtosis	Veta I	0.23								
Kurtosis	veta II	3.16								
Sam	ple Size	582								
	Percentiles									
Millimeters		Inches								
136.1	1st	5.36								
137.6	2nd	5.42								
138.6	3rd	5.46								
140.0	5th	5.51								
142.2	10th	5.60								
143.7	15th	5.66								
144.9	20th	5.71								
146.0	25th	5.75								
147.0	30th	5.79								
148.0	35th	5.83								
148.9	40th	5.86								
149.8	45th	5.90								
150.7	50th	5.93								
151.6	55th	5.97								
152.5	60th	6.00								
153.5	65th	6.04								
154.5	70th	6.08								
155.6	75th	6.13								
156.9	80th	6.18								
158.3	85th	6.23								
160.1	90th	6.30								
162.8	95th	6.41								
164.4	97th	6.47								
165.6	98th	6.52								
167.3	99th	6.59								

Males									
Millimeters	<u> </u>	<u>Inches</u>							
175.4	Mean	6.91							
0.3	SE(Mean)	0.01							
8.5	StDev	0.34							
0.2	SE(StDev)	0.01							
147.0	Minimum	5.79							
204.0	Maximum	8.03							
Coefficient	of Variation	4.9%							
Symmetry-		0.15							
Kurtosis	Veta II	3.04							
Samp	le Size	738							
	Percentiles								
Millimeters		Inches							
155.5	1st	6.12							
158.4	2nd	6.24							
160.0	3rd	6.30							
162.1	5th	6.38							
165.0	10th	6.50							
166.9	15th	6.57							
168.4	20th	6.63							
169.7	25th	6.68							
170.8	30th	6.72							
171.9	35th	6.77							
173.0	40th	6.81							
174.0	45th	6.85							
175.0	50th	6.89							
176.1	55th	6.93							
177.2	60th	6.98							
178.4	65th	7.02							
179.6 181.0	70th	7.07							
182.6	75th	7.13							
184.5	80th 85th	7.19 7.26							
186.8	90th	7.26 7.36							
190.3	95th	7.30 7. 4 9							
192.4	97th	7. 4 9 7.57							
193.8	98th	7.63							
195.9	99th	7.71							

(69) Wrist-Wall Length

The horizontal distance between a back wall and the stylion landmark on the right wrist of the outstretched arm is measured on a wall scale. The subject stands erect in a corner looking straight ahead with the feet together and the heels 20 cm from the back wall. The buttocks and shoulders are against the wall. The right arm and hand with the palm down is stretched forward horizontally against a scale on the side wall. The thumb continues the horizontal line of the arm and the index finger curves around to touch the pad at the end of the thumb. The subject's right shoulder is held against the rear wall.





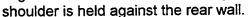
(69) Wrist-Wall Length

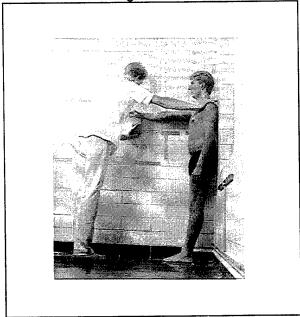
Females									
<u>Millimeter</u>	<u>'S</u>	<u>Inches</u>							
614.2	Mean	24.18							
1.3	SE(Mean)	0.05							
32.3	StDev	1.27							
0.9	SE(StDev)	0.04							
508.0	Minimum	20.00							
719.0	Maximum	28.31							
	t of Variation	5.3%							
Symmetry-	Veta I	0.18							
Kurtosis	-Veta II	3.22							
Sam	ole Size	580							
	Percentiles								
Millimeters		Inches							
539.5	1st	21.24							
550.2	2nd	21.66							
556.5	3rd	21.91							
564.4	5th	22.22							
575.5	10th	22.66							
582.7	15th	22.94							
588.2	20th	23.16							
592.9	25th	23.34							
597.2	30th	23.51							
601.2	35th	23.67							
605.0	40th	23.82							
608.8	45th	23.97							
612.6	50th	24.12							
616.5	55th	24.27							
620.4	60th	24.43							
624.7	65th	24.59							
629.2	70th	24.77							
634.3	75th	24.97							
640.1	80th	25.20							
647.1	85th	25.48							
656.2	90th	25.83							
670.1	95th	26.38							
679.4	97th	26.75							
686.4	98th	27.02							
697.2	99th	27.45							

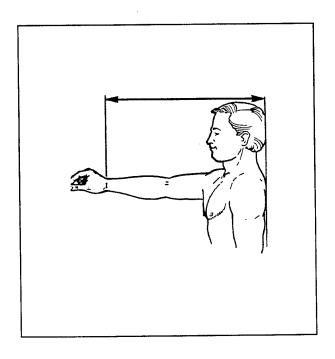
	Males	
<u>Millimeter</u>	<u>s</u>	<u>Inches</u>
680.6	Mean	26.79
1.2	SE(Mean)	0.05
33.3	StDev	1.31
0.9	SE(StDev)	0.03
565.0	Minimum	22.24
789.0	Maximum	31.06
	of Variation	4.9%
	Veta I	0.14
Kurtosis	-Veta II	2.93
Samp	ole Size	733
	Percentiles	
Millimeters		Inches
610.8	1st	24.05
617.5	2nd	24.31
622.1	3rd	24.49
628.5	5th	24.74
639.0	10th	25.16
646.4	15th	25.45
652.5	20th	25.69
657.8	25th	25.90
662.6	30th	26.09
667.1	35th	26.26
671.4	40th	26.43
675.7	45th	26.60
679.9	50th	26.77
684.1	55th	26.93
688.4	60th	27.10
692.9	65th	27.28
697.6	70th	27.47
702.8	75th	27.67
708.6	80th	27.90
715.4	85th	28.17
724.0	90th	28.50
736.8	95th	29.01
745.1	97th	29.34
751.3	98th	29.58
761.0	99th	29.96

(70) Wrist-Wall Length, Extended

The horizontal distance between a back wall and the stylion landmark on the right wrist of the maximally outstretched arm is measured on a wall scale. The subject stands erect in a corner looking straight ahead with the feet together and the heels 20 cm from the back wall. The buttocks and the left shoulder are against the wall. The right arm and hand with the palm down are stretched forward horizontally as far as possible against the side wall. The thumb continues the horizontal line of the arm and the index finger curves around to touch the pad at the end of the thumb. The subject's left







(70) Wrist-Wall Length, Extended

Females Millimeters Inche	ا ء،
077	<u> </u>
675.1 Mean 26.58	
1.5 SE(Mean) 0.06	
35.2 StDev 1.39	
1.0 SE(StDev) 0.04	
560.0 Minimum 22.05	:
821.0 Maximum 32.32	
Coefficient of Variation 5.2%	
SymmetryVeta I 0.26	
KurtosisVeta II 3.59	
Sample Size 580	
Percentiles	
Millimeters Inches	
593.6 1st 23.37	
604.1 2nd 23.78	
610.5 3rd 24.04	
618.9 5th 24.37	
631.4 10th 24.86	
639.6 15th 25.18	
646.0 20th 25.43	
651.5 25th 25.65	
656.4 30th 25.84	
661.0 35th 26.02	
665.4 40th 26.20	
669.6 45th 26.36	
673.9 50th 26.53	
678.2 55th 26.70	1
682.5 60th 26.87	
687.1 65th 27.05	
692.1 70th 27.25	
697.5 75th 27.46	
703.6 80th 27.70 710.9 85th 27.99	
710.9 85th 27.99 720.5 90th 28.36	
720.5 90th 28.36	
735.1 95th 26.94	
752.5 98th 29.63	
764.6 99th 30.10	

Males									
Millimeter		<u>Inches</u>							
748.5	Mean	29.47							
1.4	SE(Mean)	0.05							
37.0	StDev	1.46							
1.0	SE(StDev)	0.04							
630.0	Minimum	24.80							
878.0	Maximum	34.57							
Coefficient	of Variation	4.9%							
Symmetry-	Veta I	0.12							
Kurtosis	-Veta II	3.06							
Samp	ole Size	733							
	Percentiles								
Millimeters		Inches							
668.2	1st	26.31							
674.5	2nd	26.56							
679.4	3rd	26.75							
686.9	5th	27.04							
699.8	10th	27.55							
709.1	15th	27.92							
716.5	20th	28.21							
723.0	25th	28.47							
728.8	30th	28.69							
734.1	35th	28.90							
739.1	40th	29.10							
743.9	45th	29.29							
748.5	50th	29.47							
753.2	55th	29.65							
757.8	60th	29.83							
762.5	65th	30.02							
767.5	70th	30.21							
772.8	75th	30.42							
778.7	80th	30.66							
785.7	85th	30.93							
794.7	90th	31.29							
809.0	95th	31.85							
819.2	97th	32.25							
827.4	98th	32.57							
841.8	99th	33.14							

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CHAPTER III CORRELATIONS

Male Correlation Coefficients

* Correlation not significant at $p \le .05$

	9 10
1 Ab Ext Depth, S .289 .437 .561 .628 .575 .761 .171 .39	
2 Acromial Ht Sitting .289 .428 .234 .387 .331 .463 .476 .47	
3 Ankle Circ .437 .438 .553 .568 .403 .677 .311 .42	
4 Biceps C Flex .561 .234 .553 .761 .514 .715 .202 .41	.310
5 Bideltoid Bdth S .628 .387 .568 .761 .567 .766 .342 .51	7 .427
6 Bustpt-Bustpt Bdth .575 .331 .403 .514 .567 .582 .261 .36	7 .309
7 Buttock Circ .761 .463 .677 .715 .766 .582 .353 .59	7 .495
8 Buttock Height .171 .476 .311 .202 .342 .261 .353 .85	.860
9 Buttock-Knee Lgth .394 .476 .427 .419 .517 .367 .597 .856	.969
10 Buttock-Pop Lgth .325 .433 .321 .310 .427 .309 .495 .860 .96	9
11 Calf Circumference .552 .339 .802 .706 .676 .486 .764 .218 .39	.266
12 Calf Height .172 .400 .200 .214 .297 .197 .330 .827 .76	.738
13 Chest Circ .753 .381 .570 .751 .839 .704 .813 .283 .49	2 .401
14 Chest Circ at Scye .697 .388 .584 .779 .879 .658 .792 .309 .50	5 .410
15 Chest Depth .772 .306 .517 .684 .705 .638 .779 .239 .45	4 .369
16 Crotch Height .036 .448 .246 .142 .255 .153 .261 .928 .83	9 .843
17 Crotch Length, O .497 .515 .556 .461 .596 .386 .679 .332 .47	1 .394
18 Crotch Lgth Pos, O .185 .421 .394 .254 .339 .132 .420 .280 .38	5 .342
19 Elbow Circ .601 .451 .667 .824 .757 .543 .774 .396 .56	5 .453
20 Elbow Rest Height .196 .747 .273 .145 .191 .160 .262 *07803	8 *076
21 Eye Height, Sitting .128 .853 .372 .178 .334 .187 .366 .487 .46	8 .437
22 Forearm Circ, Flex .497 .333 .596 .834 .711 .467 .650 .292 .45	
23 Forearm-Forearm B .628 .319 .529 .752 .839 .558 .726 .224 .42	
24 Forearm-Hand Lgth .166 .476 .374 .265 .378 .274 .382 .814 .73	
25 Functional Leg Lgth .297 .509 .410 .329 .450 .345 .502 .924 .92	
26 Gluteal Furrow Hght .139 .462 .294 .193 .330 .240 .315 .950 .84	
27 Head Circ .351 .340 .417 .369 .441 .293 .464 .272 .33	
28 Hip Breadth, Sitting .679 .462 .641 .638 .692 .551 .936 .392 .59	
29 Interscye II .336 .215 .406 .477 .660 .277 .469 .215 .34	
30 Knee Circ .621 .487 .745 .668 .669 .523 .851 .397 .58	
31 Knee Height, Mid .181 .479 .338 .235 .347 .262 .379 .918 .8	7 .805
32 Knee Height, Sitting .241 .533 .439 .316 .429 .316 .480 .922 .85	
33 Lateral Malleolus H .173 .408 .327 .194 .261 .214 .314 .434 .4	
34 Lower Thigh Circ .635 .417 .751 .707 .672 .529 .857 .281 .40	
35 Neck Bustpt Lgth .563 .432 .505 .528 .586 .550 .662 .318 .4	
36 Neck Circ .605 .390 .519 .676 .703 .482 .675 .246 .4	
37 Neck Circ, Base .554 .389 .506 .604 .677 .448 .642 .277 .4	
38 Ovrhd Fngrtp Rch E .177 .633 .383 .219 .407 .292 .403 .894 .8	
39 Ovrhd Fngrtp Rch S .228 .707 .422 .252 .473 .352 .465 .759 .73	
40 Popliteal Height .046 .456 .253 .107 .261 .170 .247 .913 .79	

		1	2	3	4	5	6	7	8	9	10
41	Scye Circ	.654	.469	.614	.787	.776	.566	.775	.382	.555	.454
42	Scye Depth	.373	.274	.377	.385	.452	.336	.486	.322	.416	.358
43	Shoulder Circ	.625	.362	.587	.782	.934	.590	.764	.358	.530	.432
44	Shoulder Lgth	.011	.022	.096	.084	.326	.089	.138	.272	.276	.272
45	Sitting Height	.129	.859	.394	.190	.351	.203	.381	.495	.479	.446
46	Slv Lgth Spine-El	.346	.491	.448	.416	.664	.422	.550	.667	.729	.681
47	Slv Lgth Spine-Sc	.378	.326	.392	.467	.657	.321	.482	.217	.370	.304
48	Slv Lgth Spine-Wr	.314	.518	.446	.401	.613	.411	.537	.778	.796	.756
49	Sleeve Outseam	.181	.499	.315	.201	.361	.297	.368	.813	.755	.742
50	Span	.173	.494	.368	.244	.442	.312	.394	.846	.773	.758
51	Stature	102	.725	444	244	440	200	405	005	000	045
52	Tenth Rib Hght	.193 .226	.725 .627	.414	.244	.410	.288	.435	.885	.830	.815
53	Thigh Circ	.220 .718	.344	.405 .652	.237	.403	.304	.431	.928	.851	.840
54	Thigh Clearance	.718 .674	.354	.586	.762 .703	.753 .687	.528 .463	.932	.260	.507	.399
5 4	Thumbtip Reach	.234	.473	.363	.703	.388	. 4 03	.805 .417	.226	.467	.351
56	Vert Trnk Circ USA	.662	. 4 73	.303 .618	.202 .558	.300 .686	.513 .546		.800	.757	.735
57	Waist Back Lgth, O	.512	.666	.395	.313	.430	.468	.795	.474	.618	.542
58	Waist Circ, NI	.902	.358	.533	.513 .662	.430 .760	. 40 6 .654	.551 .832	.426 .242	.481	.446
59	Waist Circ, O	.912	.390	.533 .548	.635	.723	.630	.878	.242 .259	.456 .494	.368 .408
60	Waist Front Lgth, O	.554	.619	.346 .416	.372	.123 .449	.630 .457		.25 9 .344		
00	Waist Fort Egui, O	.554	.019	.410	.312	.449	.457	.560	.344	.433	.395
61	Waist Hght, NI	.274	.604	.417	.273	.431	.315	.485	.936	.883	.867
62	Waist Hght Sit, NI	.382	.688	.435	.296	.201	.299	.533	.355	.376	.317
63	Waist Hght Sit, O	110	.528	.283	.103	.435	028	.214	.263	.281	.246
64	Waist Hip Lgth	217	.334	.149	006	.071	135	.033	*.091	.214	.182
65	Waist NI Waist O Lg	.590	.160	.232	.296	.309	.384	.463	.112	.189	.164
66	Weight	.773	.552	.727	.781	.847	.636	.936	.474	.676	.569
67	Wrist Cen Grip Lgth	.154	.232	.290	.241	.240	.135	.231	.267	.226	.194
68	Wrist Circ	.463	.527	.690	.575	.599	.415	.607	.422	.510	.406
69	Wrist Wall Lgth	.240	.455	.346	.266	.385	.313	.421	.782	.752	.731
70	Wrist Wall Lgth, Ex	.232	.746	.356	.243	.388	.337	.427	.763	.726	.708
- Co	rrelation not significant a	It $p \leq .05$									

¹⁶¹

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	11 .552 .339 .802 .706 .676 .486 .764 .218 .398 .266	12 .172 .400 .200 .214 .297 .197 .330 .827 .765 .738	13 .753 .381 .570 .751 .839 .704 .813 .283 .492 .401	14 .697 .388 .584 .779 .879 .658 .792 .309 .505	15 .772 .306 .517 .684 .705 .638 .779 .239 .454	16 .036 .448 .246 .142 .255 .153 .261 .928 .839 .843	17 .497 .515 .556 .461 .596 .386 .679 .332 .471	18 .185 .421 .394 .254 .339 .132 .420 .280 .385 .342	19 .601 .451 .669 .824 .757 .543 .774 .396 565 .453	20 .196 .747 .273 .145 .191 .160 .262 *078 038 *076
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.164 .671 .684 .618 .147 .536 .312 .731 .218	.164 .231 .260 .217 .841 .265 .226 .366 -110	.671 .231 .965 .898 .180 .606 .321 .752 .232	.684 .260 .965 .847 .213 .615 .340 .780	.618 .217 .898 .847 .139 .544 .247 .689 .179	.147 .841 .180 .213 .139 .247 .276 .314 112	.536 .265 .606 .615 .544 .247 .711 .564	312 .226 .321 .340 .247 .276 .711 .330 .309	.731 .366 .752 .780 .689 .314 .564 .330	.218 110 .232 .220 .179 118 .372 .309 .220
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.280 .699 .639 .293 .341 .208 .394 .709 .458	.417 .292 .190 .754 .827 .852 .246 .342 .187 .353	.233 .691 .832 .298 .416 .268 .458 .741 .584	.272 .739 .839 .335 .430 .302 .470 .710 .635	.167 .611 .726 .243 .376 .220 .404 .710 .465 .668	.486 .230 .148 .794 .905 .939 .206 .307 .176 .307	.450 .486 .531 .357 .440 .310 .403 .581 .402 .606	.421 .280 .265 .290 .355 .253 .268 .357 .279	.385 .890 .716 .470 .505 .373 .475 .709 .476 .787	.566 .163 .234 060 045 103 .211 .232 .104 .268
31 32 33 34 35 36 37 38 39 40	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.254 .359 .279 .805 .522 .568 .547 .288 .348 .144 at p ≤ .05	.862 .864 .466 .243 .285 .242 .249 .790 .658 .846	.296 .375 .218 .715 .667 .712 .664 .326 .391	.322 .407 .242 .708 .642 .728 .685 .365 .425	.259 .331 .208 .680 .623 .645 .588 .260 .315 .133	.907 .907 .444 .187 .258 .150 .179 .896 .744	.345 .425 .296 .607 .450 .524 .510 .424 .486 .285	.282 .334 .216 .395 .270 .285 .288 .365 .395 .252	.417 .517 .368 .774 .602 .721 .669 .444 .468	067 020 .148 .273 .224 .270 .254 .054 .190 *092

41 42 43 44 45 46 47 48 49 50	Scye Circ Scye Depth Shoulder Circ Shoulder Lgth Sitting Height Slv Lgth Spine-El Slv Lgth Spine-Sc Slv Lgth Spine-Wr Sleeve Outseam Span	11 .663 .365 .688 .114 .288 .447 .443 .420 .256 .297	12 .663 .365 .688 .114 .288 .447 .443 .420 .256 .297	13 .819 .424 .860 .110 .250 .565 .594 .520 .302	14 .826 .420 .908 .168 .289 .608 .635 .561 .326	15 .745 .423 .742 .079 .188 .449 .466 .417 .251 .243	16 .296 .273 .269 .281 .494 .645 .205 .757 .809	17 .571 .351 .595 .115 .462 .454 .386 .461 .314	18 .330 .217 .327 *.088 .431 .296 .200 .329 .258 .311	19 .824 .450 .778 .119 .401 .568 .503 .574 .392 .440	20 .224 .015 .145 199 .568 038 .180 058 126 107
51 52 53 54 55 56 57 58 59 60	Stature Tenth Rib Hght Thigh Circ Thigh Clearance Thumbtip Reach Vert Trnk Circ USA Waist Back Lgth, O Waist Circ, NI Waist Circ, O Waist Front Lgth, O	.295 .299 .787 .701 .294 .605 .365 .633 .640	.768 .799 .262 .242 .730 .405 .363 .208 .236 .309	.328 .349 .777 .697 .352 .726 .459 .885 .848	.364 .382 .767 .702 .375 .715 .429 .837 .790 .468	.268 .301 .750 .679 .307 .668 .452 .839 .825	.873 .897 .171 .154 .777 .382 .346 .109 .137 .268	.472 .488 .613 .561 .361 .744 .270 .573 .588 .292	.414 .407 .361 .322 .292 .479 *.082 .251 .279 .115	.478 .454 .739 .700 .462 .716 .476 .697 .686	.207 .100 .214 .246 *087 .539 .390 .231 .245 .410
61 62 63 64 65 66 67 68 69 70	Waist Hght, NI Waist Hght Sit, NI Waist Hght Sit, O Waist Hip Lgth Waist NI Waist O Lg Weight Wrist Cen Grip Lgth Wrist Circ Wrist Wall Lgth Wrist Wall Lgth, Ex rrelation not significant a	.314 .372 .175 .051 .298 .794 .227 .601 .286 .288 t p ≤ .05	.825 .300 .230 .211 .102 .422 .229 .405 .715 .661	.375 .396 .092 256 .390 .879 .163 .570 .367	.401 .408 .137 .028 .342 .874 .183 .600 .387 .397	.333 .381 .051 081 .448 .823 .145 .519 .327 .343	.905 .280 .296 .288 008 .374 .214 .362 .762	.472 .529 .555 .447 .007 .695 .213 .506 .359	.377 .359 .574 .536 234 .415 .176 .322 .282 .300	.488 .453 .210 .060 .344 .861 .335 .780 .450 .434	.062 .530 .418 .215 .109 .284 .117 .254 097 100

¹⁶³

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	21 .128 .853 .372 .178 .334 .187 .366 .487 .468	22 .497 .333 .596 .834 .711 .467 .650 .292 .452 .346	23 .628 .319 .529 .752 .839 .558 .726 .224 .429	24 .166 .476 .374 .265 .378 .274 .382 .814 .733 .709	25 .297 .509 .410 .329 .450 .345 .502 .924 .923	26 .139 .474 .544 .413 .330 .240 .315 .950 .844 .845	27 .351 .340 .417 .369 .441 .293 .464 .272 .331 .263	28 .679 .462 .641 .638 .692 .551 .936 .392 .594	29 .336 .215 .406 .477 .660 .277 .469 .215 .346 .280	30 .621 .487 .745 .668 .669 .523 .851 .397 .553 .428
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.280 .417 .233 .272 .167 .486 .450 .421 .385 .566	.699 .292 .691 .739 .611 .230 .486 .280 .890 .163	.639 .190 .832 .839 .726 .148 .531 .265 .716 .234	.293 .754 .298 .335 .243 .794 .357 .290 .470 060	.341 .827 .416 .430 .376 .905 .440 .355 .505	.208 .852 .268 .302 .220 .939 .310 .253 .373 103	.394 .246 .458 .470 .404 .206 .403 .268 .475 .211	.709 .342 .741 .710 .710 .307 .581 .357 .709 .232	.458 .187 .584 .635 .465 .176 .402 279 .476 .104	767 353 705 700 668 307 606 399 787 268
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.282 .197 .491 .509 .483 .302 .384 .256	.282 .669 .373 .398 .287 .414 .568 .479 .652	.197 .669 .250 .349 .218 .367 .649 .526	.491 .373 .250 .803 .820 .327 .395 .240 .440	.509 .398 .349 .803 .916 .313 .518 .281 .508	.483 .287 .218 .820 .916 .248 .339 .228 .359	.302 .414 .367 .327 .313 .248 .427 .349 .473	.384 .568 .649 .395 .518 .339 .427 .411	.256 .479 .526 .240 .281 .228 .349 .411	.396 .652 .637 .440 .508 .359 .473 .828
31 32 33 34 35 36 37 38 39 40	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.486 .537 .392 .320 .373 .288 .335 .668 .735 .502 at p ≤ .05	.322 .405 .251 .660 .499 .686 .624 .338 .368	.246 .322 .201 .656 .575 .655 .608 .265 .319	.822 .859 .381 .349 .329 .296 .323 .861 .789	.903 .929 .456 .409 .420 .352 .356 .898 .779	.920 .927 .453 .245 .301 .241 .263 .902 .765 .929	.278 .348 .200 .448 .373 521 .499 .315 .353 .247	.403 .496 .310 .819 .652 .561 .531 .433 .482	.235 .277 .106 .425 .387 .518 .532 .279 .318 .176	.432 .543 .361 .963 .607 .601 .563 .432 .466 .278

41 42 43 44 45 46 47 48 49 50	Scye Circ Scye Depth Shoulder Circ Shoulder Lgth Sitting Height Slv Lgth Spine-El Slv Lgth Spine-Sc Slv Lgth Spne-Wr Sleeve Outseam Span	21 .335 .349 .324 .235 .977 .518 .293 .544 .507	22 .757 .357 .746 .110 .293 .488 .501 .486 .304 .346	23 .755 .381 .800 .112 .211 .511 .569 .465 .223	24 .400 .325 .394 .285 .497 .644 .236 .814 .849	25 .496 .394 .466 .276 .520 .722 .308 .819 .814 .839	26 .361 .293 .357 .281 .492 .676 .226 .787 .822 .848	27 .429 .274 .460 .098 .357 .358 .310 .361 .256	28 .702 .492 .677 .155 .340 .556 .440 .540 .399 .417	29 .437 .406 .693 .424 .279 .512 .602 .447 .213 .303	30 .710 .427 .679 .100 .417 .512 .415 .521 .405 .418
51 52 53 54 55 56 57 58 59 60	Stature Tenth Rib Hght Thigh Circ Thigh Clearance Thumbtip Reach Vert Trnk Circ USA Waist Back Lgth, O Waist Circ, NI Waist Circ, O Waist Front Lgth, O	.784 .628 .247 .256 .479 .665 .624 .195 .236	.350 .338 .654 .643 .363 .585 .331 .610 .570	.273 .281 .721 .658 .297 .622 .377 .755 .724	.797 .808 .293 .266 .848 .489 .416 .241 .259	.888 .918 .409 .375 .804 .583 .476 .372 .404	.880 .918 .243 .210 .804 .440 .399 .216 .230 .326	.360 .327 .430 .387 .294 .474 .338 .462 .437 .298	.466 .450 .873 .685 .433 .741 .579 .745 .818	.283 .282 .460 .404 .315 .401 .288 .479 .440	.480 .475 .817 .724 .455 .736 .508 .694 .736
61 62 63 64 65 66 67 68 69 70	Waist Hght, NI Waist Hght Sit, NI Waist Hght Sit, O Waist Hip Lgth Waist NI Waist O Lg Weight Wrist Cen Grip Lgth Wrist Circ Wrist Wall Lgth Wrist Wall Lgth Ex rrelation not significant a	.599 .631 .567 .415 .035 .450 .198 .475 .456 .449	.368 .356 .174 .071 .245 .758 .288 .704 .357	.317 .361 .118 .004 .345 .785 .200 .537 .310	.820 .335 .273 .220 *.081 .496 .370 .545 .804	.935 .380 .289 .222 .150 .607 .257 .505 .792	.926 .320 .252 .210 *.076 .450 .242 .406 .792 .758	.345 .368 .164 .054 .228 .536 .231 .476 .274	.503 .508 .180 .007 .455 .874 .229 .558 .436	.284 .290 .167 .140 .126 .550 .148 .399 .316 .299	.505 .511 .238 .056 .380 .863 .310 .690 .447

Male	Corre	ation	Coeff	icients

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	31 .182 .479 .745 .235 .347 .262 .379 .918 .817 .805	32 .241 .533 .439 .316 .429 .316 .480 .922 .853 .824	33 .173 .408 .327 .194 .261 .214 .314 .434 .411	34 .635 .417 .751 .706 .672 .529 .857 .281 .468 .343	35 .563 .432 .505 .528 .586 .550 .662 .318 .471 .409	36 .605 .390 .519 .676 .703 .482 .675 .246 .410	37 .554 .388 .506 .604 .677 .448 .643 .277 .405 .319	38 .177 .633 .383 .219 .407 .292 .403 .894 .835 .821	39 .228 .707 .421 .252 .473 .352 .465 .759 .734 .710	40 .046 .456 .253 .107 .261 .170 .247 .913 .759
11	Calf Circumference	.254	.359	.279	.805	.522	.568	.547	.288	.341	.144
12	Calf Height	.862	.864	.466	.243	.285	.242	.249	.790	.658	.846
13	Chest Circ	.296	.375	.218	.715	.667	.712	.664	.326	.391	.181
14	Chest Circ at Scye	.322	.407	.242	.708	.642	.728	.685	.365	.425	.220
15	Chest Depth	.259	.331	.208	.680	.623	.645	.588	.260	.315	.133
16	Crotch Height	.907	.908	.444	.187	.258	.150	.179	.896	.744	.918
17	Crotch Length, O	.345	.425	.296	.607	.450	.524	.510	.424	.486	.285
18	Crotch Lgth Pos, O	.282	.334	.216	.395	.270	.285	.288	.365	.395	.252
19	Elbow Circ	.417	.517	.368	.774	.602	.721	.669	.444	.468	.313
20	Elbow Rest Height	067	020	.148	.273	.224	.270	.254	.054	.190	*092
20	Liber Neet Height	007	.020	. 1 10	.2.10			,			
21	Eye Height, Sitting	.486	.537	.392	.320	.373	.288	.335	.668	.735	.502
22	Forearm Circ, Flex	.322	.405	.251	.660	.499	.686	.624	.338	.368	.228
23	Forearm-Forearm B	.246	.322	.201	.656	.575	.655	.608	.265	.319	.136
24	Forearm-Hand Lgth	.822	.859	.381	.349	.329	.296	.323	.861	.789	.822
25	Functional Leg Lgth	.903	.929	.456	.409	.420	.352	.356	.898	.779	.868
26	Gluteal Furrow Hght	.920	.927	.453	.245	.301	.241	.263	.902	.765	.929
27	Head Circ	.278	.348	.200	.448	.373	.521	.499	.315	.647	.583
28	Hip Breadth, Sitting	.403	.496	.310	.819	.652	.561	.531	.433	.482	.273
29	Interscye II	.235	.277	.106	.425	.387	.518	.532	.279	.318	.176
30	Knee Circ	.432	.543	.361	.963	.607	.601	.563	.432	.466	.278
31	Knee Height, Mid		.961	.514	.314	.343	.271	.283	.880	.739	.926
32	Knee Height, Sitting	.961	.50	.537	.441	.411	.343	.357	.908	.787	.934
33	Lateral Malleolus H	.514	.537		.310	.300	.196	.223	.451	.406	.477
34	Lower Thigh Circ	.314	.441	.310	· = • •	.599	.602	.565	.320	.376	.162
35	Neck Bustpt Lgth	.343	.411	.300	.599		.533	.493	.392	.431	.250
36	Neck Circ	.271	.343	.196	.602	.533		.911	.287	.330	.181
37	Neck Circ, Base	.283	.357	.223	.565	.493	.911		.315	.359	.223
38	Ovrhd Fngrtp Rch E	.880	.908	.451	.320	.392	.287	.315		.920	.886
39	Ovrhd Fngrtp Rch S	.739	.787	.406	.376	.431	.330	.359	.920		.749
40	Popliteal Height	.926	.934	.477	.162	.250	.181	.223	.886	.749	
	orrelation not significant						-				

41 42 43 44 45 46 47 48 49 50	Scye Circ Scye Depth Shoulder Circ Shoulder Lgth Sitting Height Slv Lgth Spine-El Slv Lgth Spine-Sc Slv Lgth Spine-Wr Sleeve Outseam Span	31 .385 .318 .374 .263 .498 .656 .247 .772 .800 .826	32 .470 .357 .453 .279 .551 .708 .294 .820 .828	33 .327 .193 .258 .066 .403 .365 .165 .385 .378	34 .706 .404 .684 .065 .339 .443 .396 .440	35 .641 .499 .591 .244 .388 .499 .383 .481	36 .719 .434 .729 .050 .319 .445 .499 .428	37 .672 .402 .700 .045 .358 .456 .470 .445	38 .420 .365 .423 .331 .673 .770 .321 .865 .877	39 .451 .394 .484 .345 .744 .775 .362 .839 .810	40 .287 .258 .285 .287 .507 .630 .182 .752 .806
50	Орап	.020	.609	.378	.324	.368	.286	.320	.916	.870	.843
51 52 53 54 55 56 57 58 59 60	Stature Tenth Rib Hght Thigh Circ Thigh Clearance Thumbtip Reach Vert Trnk Circ USA Waist Back Lgth, O Waist Circ, NI Waist Circ, O Waist Front Lgth, O	.868 .898 .301 .268 .790 .491 .425 .253 .286	.901 .922 .393 .349 .821 .578 .471 .323 .356 .409	.512 .483 .264 .226 .364 .411 .327 .208 .250 .340	.367 .365 .855 .747 .360 .701 .455 .706 .745 .487	.425 .373 .596 .515 .406 .658 .552 .639 .669	.330 .314 .647 .664 .318 .658 .461 .727 .680 .429	.363 .333 .604 .605 .335 .634 .457 .676 .636	.941 .925 .287 .270 .838 .592 .517 .256 .285 .445	.877 .827 .348 .321 .768 .666 .573 .311 .343 .513	.867 .893 .150 .126 .779 .406 .364 .125 .143 .289
61 62 63 64 65 66 67 68 69 70 * Co	Waist Hght, NI Waist Hght Sit, NI Waist Hght Sit, O Waist Hip Lgth Waist NI Waist O Lg Weight Wrist Cen Grip Lgth Wrist Circ Wrist Wall Lgth Wrist Wall Lgth, Ex rrelation not significant a	.916 .352 .277 .222 .114 .494 .255 .458 .774 .738	.938 .394 .307 .249 .132 .591 .297 .551 .802	.481 .268 .237 .207 *.076 .366 .217 .395 .346 .339	.395 .471 .199 .022 .385 .855 .293 .644 .354	.411 .382 .112 .025 .347 .706 .188 .510 .404	.348 .444 .157 .015 .368 .767 .256 .625 .318 .303	.369 .439 .149 .012 .344 .725 .235 .593 .332 .338	.923 .436 .369 .334 .061 .531 .250 .511 .815	.821 .515 .419 .335 *.091 .576 .258 .754 .745	.895 .295 .280 .263 .015 .368 .227 .532 .760 .745

1 2 3 4 5 6 7 8	Ab Ext Depth, S Acromial Ht Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth	41 .654 .469 .614 .787 .776 .566 .775 .382 .555	42 .373 .274 .377 .385 .452 .336 .486 .322 .416	43 .625 .362 .587 .782 .934 .590 .764 .358 .530	44 .001 .022 .096 .084 .326 .887 .138 .272	45 .129 .859 .394 .190 .351 .203 .381 .495 .479	46 .346 .491 .448 .416 .664 .422 .550 .667	47 .378 .326 .392 .467 .657 .321 .482 .217	48 .314 .518 .446 .401 .613 .411 .537 .778	49 .181 .499 .315 .201 .361 .297 .368 .813 .755	50 .173 .494 .368 .238 .442 .312 .394 .846 .773
10	Buttock-Pop Lgth	.454	.358	.432	.272	.446	.681	.304	.756	.742	.758
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.663 .325 .819 .826 .745 .296 .571 .330 .824	.365 .277 .424 .420 .423 .273 .351 .217 .450	.688 .311 .860 .908 .742 .269 .595 .327 .778 .145	.114 .247 .110 .168 .079 .281 .115 .088 .119	.288 .424 .250 .289 .188 .494 .462 .431 .401	.447 .578 .565 .608 .449 .645 .454 .296 .568	.443 .196 .594 .635 .466 .205 .386 .200 .503 .180	.420 .693 .520 .561 .417 .757 .461 .329 .574	.256 .728 .302 .326 .251 .809 .314 .258 .392 126	.297 .751 .329 .375 .243 .828 .379 .311 .440
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.335 .757 .755 .400 .496 .361 .429 .702 .437	.349 .357 .381 .325 .394 .293 .274 .492 .406 .427	.324 .746 .800 .394 .466 .357 .460 .677 .693	.235 .110 .112 .285 .276 .281 .098 .155 .424	.977 .293 .211 .497 .520 .492 .357 .400 .278 .417	.518 .488 .511 .644 .722 .676 .358 .556 .512	.293 .501 .569 .236 .308 .226 .310 .440 .602 .415	.543 .486 .465 .814 .819 .787 .361 .540 .447	.507 .304 .223 .849 .814 .822 .256 .399 .213 .405	.548 .346 .272 .920 .839 .848 .320 .417 .303
31 32 33 34 35 36 37 38 39 40	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.385 .470 .327 .706 .641 .719 .672 .420 .451 .287	.318 .357 .193 .404 .499 .434 .402 .365 .394 .258	.374 .453 .258 .684 .591 .729 .700 .423 .484 .284	.263 .279 .066 .065 .244 .050 .045 .331 .345 .287	.498 .551 .403 .339 .388 .319 .358 .673 .744	.656 .708 .365 .443 .499 .445 .456 .770 .775 .630	.247 .294 .165 .396 .383 .499 .470 .321 .362 .182	.772 .820 .385 .440 .481 .428 .445 .865 .839	.800 .828 .378 .304 .370 .248 .275 .877 .810	.826 .859 .378 .324 .368 .286 .320 .916 .870 .843

		41	42	43	44	45	46	47	48	49	50
41	Scye Circ		.468	.796	.031	.348	.583	.499	.567	.412	.408
42	Scye Depth	.468		.467	.408	.366	.480	.278	.466	.366	.398
43	Shoulder Circ	.796	.467		.339	.338	.678	.633	.629	.379	.455
44	Shoulder Lgth	.031	.408	.339		.240	.419	.236	.404	.261	.402
45	Sitting Height	.348	.366	.338	.240		.524	.297	.549	.509	.554
46	Slv Lgth Spine-El	.583	.480	.678	.419	.524		.690	.952	.747	.785
47	Slv Lgth Spine-Sc	.499	.278	.633	.236	.297	.690		.586	.248	.294
48	Slv Lgth Spine-Wr	.567	.466	.629	.404	.549	.952	.586		.855	.894
49	Sleeve Outseam	.412	.366	.379	.261	.509	.747	.248	.855		.908
50	Span	.408	.398	.455	.402	.554	.785	.294	.894	.907	
51	Stature	.444	.391	.416	.298	.802	.714	202	000	000	044
52	Tenth Rib Hght	.433	.351	.424				.302	.802	.800	.844
53	Thigh Circ	. 4 33	.422	. 424 .750	.273	.638 .264	.703	.284	.801	.807	.847
54	Thigh Clearance	.702	.362	.692	.107 .065	.204 .274	.457	.448	.439	.265	.294
55	Thumbtip Reach	.702 .447	.302 .402	.692	.065 .298		.397	.426	.387	.239	.255
56	Vert Trnk Circ USA	. 74 7	.402 .431			.485	.717	.296	.826	.850	.866
57	Waist Back Lgth, O	.136 .487	.431 .604	.674 .430	.111	.678	.600	.482	.607	.477	.502
58	Waist Circ, NI	. 4 67 .772	.439	.763	.215 .051	.641	.494	.268	.497	.454	.446
59	Waist Circ, O	.749	.439 .470			.207	.463	.489	.423	.244	.257
60	Waist Front Lgth, O			.725	.056	.247	.462	.448	.429	.273	.272
00	Waist Front Egui, O	.511	.357	.449	.132	.605	.428	.279	.413	.367	.366
61	Waist Hght, NI	.473	.380	.450	.274	.613	.713	.280	.813	.818	.851
62	Waist Hght Sit, NI	.443	.345	.438	.118	.649	.391	.263	.402	.333	.353
63	Waist Hght Sit, O	.162	.130	.171	*.092	.579	.251	.197	.287	.238	.275
64	Waist Hip Lgth	.022	.043	.069	.124	.419	.229	.182	.251	.203	.241
65	Waist NI Waist O Lg	.374	.230	.319	025	.046	.138	*.087	.125	.099	.063
66	Weight	.857	.521	.854	.168	.470	.656	.555	.651	.473	.512
67	Wrist Cen Grip Lgth	.254	.177	.218	.041	.200	.191	.114	.248	.223	.294
68	Wrist Circ	.680	.394	.604	.097	.488	.520	.430	.556	.457	.503
69	Wrist Wall Lgth	.451	.397	.418	.285	.463	.713	.300	.815	.837	.834
70	Wrist Wall Lgth, Ex	.438	.400	.426	.294	.459	.698	.253	.797	.830	.835
* Co	rrelation not significant a	t $p \leq .05$									

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	51 .193 .725 .414 .244 .410 .288 .435 .885 .830 .815	52 .226 .627 .405 .237 .403 .304 .431 .928 .851 .840	53 .718 .344 .652 .762 .753 .528 .932 .260 .507 .399	54 .674 .354 .586 .703 .687 .463 .805 .226 .467 .351	55 .234 .473 .363 .262 .388 .313 .417 .800 .757 .745	56 .662 .785 .618 .558 .686 .546 .795 .474 .618 .542	57 .512 .666 .395 .313 .430 .468 .551 .426 .481	58 .902 .358 .533 .662 .760 .654 .832 .242 .456 .368	59 .912 .390 .548 .635 .732 .630 .878 .259 .494	60 .555 .619 .416 .372 .449 .457 .560 .344 .433 .395
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.295 .768 .328 .364 .268 .873 .472 .414 .478 .207	.299 .799 .349 .382 .301 .897 .488 .407 .454	.787 .262 .777 .767 .750 .171 .613 .361 .739	.701 .242 .697 .702 .679 .154 .561 .322 .700 .246	.294 .730 .352 .375 .307 .777 .361 .292 .462 087	.605 .405 .726 .715 .668 .382 .744 .479 .716	.365 .363 .459 .429 .452 .346 .270 .082 .476 .390	.633 .208 .885 .837 .839 .109 .573 .251 .697	.640 .236 .848 .790 .825 .137 .588 .279 .686	.398 .309 .480 .468 .481 .268 .292 .115 .523 .410
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.784 .350 .273 .797 .888 .880 .360 .466 .282	.628 .338 .281 .808 .918 .918 .327 .450 .280	.247 .654 .721 .293 .409 .243 .430 .873 .460 .817	.256 .643 .658 .266 .375 .210 .387 .685 .404	.479 .363 .297 .848 .804 .804 .294 .433 .315 .455	.665 .585 .622 .489 .583 .440 .474 .741 .401	.624 .331 .377 .416 .476 .399 .338 .579 .288	.195 .610 .755 .241 .372 .216 .462 .745 .479	.236 .570 .724 .259 .404 .230 .437 .818 .440	.599 .397 .405 .316 .405 .326 .298 .559 .250
31 32 33 34 35 36 37 38 39 40 * Co	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.868 .901 .512 .367 .425 .330 .363 .941 .877 .867	.898 .922 .483 .365 .373 .314 .333 .925 .827 .893	.301 .393 .264 .855 .596 .647 .604 .287 .348 .150	.268 .349 .226 .747 .515 .664 .605 .270 .321 .126	.790 .821 .364 .360 .406 .318 .335 .838 .768	.491 .578 .411 .701 .658 .658 .634 .592 .666 .406	.425 .471 .327 .455 .552 .461 .457 .517 .573	.253 .323 .208 .706 .639 .727 .676 .256 .311 .125	.286 .356 .250 .745 .669 .680 .636 .285 .343 .143	.351 .409 .340 .487 .540 .429 .374 .445 .513 .289

41 42 43 44 45 46 47 48 49 50	Scye Circ Scye Depth Shoulder Circ Shoulder Lgth Sitting Height Slv Lgth Spine-El Slv Lgth Spine-Sc Slv Lgth Spine-Wr Sleeve Outseam Span	51 .443 .391 .416 .298 .802 .714 .302 .802 .800 .844	52 .433 .351 .424 .273 .638 .703 .284 .801 .807	53 .738 .422 .750 .107 .264 .457 .448 .439 .265 .294	54 .702 .362 .692 .065 .274 .397 .426 .387 .239	55 .447 .402 .415 .298 .485 .717 .296 .826 .850 .866	56 .738 .431 .674 .111 .678 .600 .482 .607 .477	57 .487 .604 .430 .215 .641 .494 .268 .497 .454	58 .772 .439 .763 .051 .207 .463 .489 .423 .244 .257	59 .749 .470 .725 .056 .247 .462 .448 .429 .273 .272	60 .511 .357 .449 .132 .605 .428 .279 .413 .367
51 52 53 54 55 56 57 58 59 60	Stature Tenth Rib Hght Thigh Circ Thigh Clearance Thumbtip Reach Vert Trnk Circ USA Waist Back Lgth, O Waist Circ, NI Waist Circ, O Waist Front Lgth, O	.940 .314 .296 .784 .670 .594 .275 .311	.940 .325 .296 .799 .612 .494 .301 .323	.314 .325 .849 .314 .696 .447 .777 .821	.296 .296 .849 .278 .660 .413 .715 .725 .450	.785 .799 .314 .278 .513 .477 .304 .327 .383	.670 .612 .696 .660 .513 .722 .724 .751	.594 .494 .447 .413 .477 .722 .531 .577 .761	.275 .301 .777 .716 .304 .724 .531	.311 .323 .821 .725 .327 .751 .577 .956	.543 .442 .471 .450 .383 .715 .761 .546
61 62 63 64 65 66 67 68 69 70	Waist Hght, NI Waist Hght Sit, NI Waist Hght Sit, O Waist Hip Lgth Waist NI Waist O Lg Weight Wrist Cen Grip Lgth Wrist Circ Wrist Wall Lgth Wrist Wall Lgth, Ex rrelation not significant a	.935 .523 .451 .348 *.090 .562 .274 .536 .763 .745 at p ≤ .05	.964 .496 .386 .306 .106 .555 .280 .506 .784	.380 .462 .156 023 .456 .891 .211 .533 .323	.343 .453 .210 .022 .395 .815 .185 .544 .287	.806 .328 .245 .179 .117 .522 .300 .508 .983 .895	.623 .654 .390 .194 .368 .863 .270 .660 .506	.523 .554 .096 132 .553 .615 .219 .475 .464	.356 .448 035 149 .564 .868 .195 .550 .313 .325	.286 .478 .008 130 .585 .879 .196 .536 .334 .346	.453 .508 .051 105 .528 .615 .177 .487 .373 .360

Male Correlation Coefficients

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	61 .274 .604 .417 .273 .431 .315 .485 .926 .883 .867	62 .382 .688 .435 .296 .435 .299 .533 .355 .376	63 110 .528 .283 .103 .201 028 .214 .263 .281 .246	64 217 .334 .149 006 .071 135 .033 *.091 .214 .182	65 .590 .160 .232 .296 .309 .384 .463 .112 .189	66 .773 .552 .727 .781 .847 .636 .936 .474 .676	67 .154 .232 .290 .241 .240 .135 .231 .267 .226 .194	68 .463 .527 .690 .575 .599 .415 .607 .422 .510 .406	69 .240 .455 .346 .266 .385 .313 .421 .782 .752	70 .232 .446 .356 .243 .388 .337 .427 .763 .726 .708
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.314 .825 .375 .401 .333 .905 .472 .377 .488	.372 .300 .396 .408 .381 .280 .529 .359 .453	.175 .230 *.092 .137 .051 .296 .555 .574 .210	.051 .211 026 .028 *081 .288 .447 .536 .060 .215	.298 .102 .390 .342 .448 008 .007 234 .344	.794 .422 .879 .874 .823 .374 .695 .415 .861 .284	.227 .229 .163 .183 .145 .214 .213 .176 .335 .117	.601 .405 .570 .600 .519 .362 .506 .322 .780 .254	.286 .715 .367 .387 .327 .762 .359 .282 .450 097	.288 .661 .380 .397 .343 .725 .380 .300 .434 100
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.599 .368 .317 .820 .935 .926 .345 .503 .284	.631 .356 .361 .335 .380 .320 .368 .508 .290	.567 .174 .118 .273 .289 .252 .164 .180 .167 .238	.415 .071 .004 .220 .222 .210 .054 .007 .140	.035 .245 .345 .081 .150 .076 .228 .455 .126	.450 .758 .785 .496 .607 .450 .536 .874 .550	.198 .288 .200 .370 .257 .242 .231 .229 .148 .310	.475 .704 .537 .545 .505 .406 .476 .558 .399 .690	.456 .357 .310 .804 .792 .792 .274 .436 .316 .447	.449 .328 .306 .797 .773 .758 .319 .448 .299 .447
31 32 33 34 35 36 37 38 39 40 * Co	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height rrelation not significant at	.916 .938 .481 .395 .411 .348 .369 .923 .821 .895	.352 .394 .268 .471 .382 .444 .439 .436 .515 .295	.277 .307 .237 .199 .112 .157 .149 .369 .419	.222 .249 .207 .022 .025 .015 .012 .334 .335 .263	.114 .132 .076 .385 .347 .368 .344 .061 .091	.494 .591 .366 .855 .706 .767 .725 .531 .576	.255 .297 .217 .293 .188 .256 .235 .250 .258 .227	.458 .551 .395 .644 .510 .625 .593 .511 .532	.774 .802 .346 .354 .404 .318 .332 .815 .687	.738 .782 .339 .365 .401 .303 .338 .805 .619

		61	62	63	64	65	66	67	68	69	70
41	Scye Circ	.473	.443	.162	.022	.374	.857	.254	.680	.451	.438
42	Scye Depth	.380	.345	.130	.043	.230	.521	.177	.394	.397	.400
43	Shoulder Circ	.450	.438	.171	.069	.319	.854	.218	.604	.418	.426
44	Shoulder Lgth	.274	.118	.092	.124	025	.168	.041	.097	.285	.294
45	Sitting Height	.613	.649	.579	.419	.046	.470	.200	.488	.463	.459
4 6	Slv Lgth Spine-El	.713	.391	.251	.229	.138	.655	.191	.520	.713	.698
47	Slv Lgth Spine-Sc	.280	.263	.197	.182	*.087	.555	.114	.430	.300	.253
48	Slv Lgth Spine-Wr	.813	.402	.287	.251	.125	.651	.248	.556	.815	.797
49	Sleeve Outseam	.818	.333	.238	.203	.099	.473	.223	.457	.837	.830
50	Span	.851	.353	.275	.241	.063	.512	.294	.503	.834	.835
51	Stature	.935	.523	.451	.348	*.090	.562	.274	.536	.763	.745
52	Tenth Rib Hght	.964	.496	.386	.306	.106	.555	.280	.506	.784	.770
53	Thigh Circ	.380	.462	.156	023	.456	.891	.211	.533	.323	.327
54	Thigh Clearance	.343	.453	.210	.023	.395	.815	.185	.544	.287	.275
55	Thumbtip Reach	.806	.328	.245	.179	.117	.522	.300	.508	.983	.895
56	Vert Trnk Circ USA	.623	.654	.390	.194	.368	.863	.270	.660	.506	.504
57	Waist Back Lgth, O	.523	.554	.096	132	.553	.615	.219	.475	.464	.461
58	Waist Circ, NI	.356	.448	035	149	.564	.868	.195	.550	.313	.325
59	Waist Circ, O	.386	.478	.008	130	.585	.879	.196	.536	.334	.346
60	Waist Front Lgth, O	.453	.508	.051	105	.528	.615	.177	.489	.373	.360
00	Traiser form Egan, G	.400	.500	.001	-, 105	.520	.013	. 1 / /	.409	.575	.500
61	Waist Hght, NI		.569	.353	.255	.239	.594	.297	.511	.791	.778
62	Waist Hght Sit, NI	.569	.505	.463	.233	.504	.566	.267	.442	.791	.776
63	Waist Hght Sit, O	.353	.463	.403	.617	324	.231	.185	. 44 2 .281	.322	.210
64	Waist Hip Lgth	.355	.181	.617	.017	524 556	.060	.032	.162	.234 .175	.163
65	Waist NI Waist O Lg	.239	.504	324	556	556	.452	.032	.234	.175	.135
66	Weight	.594	.566	.231	.060	.452	.432	.155	.23 4 .721	.521	.519
67	Wrist Cen Grip Lgth	.297	.267	.185	.032	.155	.294	.294		.236	.209
68	Wrist Circ	.511	.442	.183	.162	.133	.721	.349	.349	.230 .483	.477
69	Wrist Wall Lgth	.791	.322	.234	.175	.234 .124	.721	.236	.483	.403	.898
70	Wrist Wall Lgth, Ex	.778	.341	.234	.173	.124	.519	.209	.403 .477	.898	.080
	rrelation not significant a		.541	.210	. 103	. 133	.519	.209	.477	.090	
	inclation not significant a	ι μ ≥ .00									

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Female Correlation Coefficients

		1	2	3	4	5	6	7	8	9	10
1	Ab Ext Depth, S		*.096	.363	.678	.611	.433	.705	.228	.430	.326
2	Acromial Ht, Sitting	*.096		.324	.136	.327	.184	.350	.494	.452	.409
3	Ankle Circ	.363	.324		.513	.442	.253	.566	.290	.375	.253
4	Biceps C Flex	.678	.136	.513		.698	.354	.724	.198	.394	.260
5	Bideltoid Bdth S	.611	.327	.442	.698		.434	.696	.405	.541	.438
6	Bustpt-Bustpt Bdth	.433	.184	.253	.354	.434		.383	.258	.311	.243
7	Buttock Circ	.705	.350	.566	.724	.696	.383		.356	.625	.504
8	Buttock Height	.228	.494	.290	1.980	.405	.258	.376		.853	.854
9	Buttock-Knee Lgth	.430	.452	.375	.394	.541	.311	.625	.853		.963
10	Buttock-Pop Lgth	.326	.409	.253	.260	.438	.243	.504	.854	.963	
									074	400	004
11	Calf Circumference	.480	.247	.772	.650	.546	.284	.672	.274	.420	.264
12	Calf Height	.208	.373	.173	.187	.341	.225	.359	.843	.757	.737
13	Chest Circ	.739	.263	.474	.705	.778	.599	.686	.337	.466	.353
14	Chest Circ at Scye	.689	.310	.443	.741	.854	.484	.696	.378	.498	.385
15	Chest Depth	.746	.150	.363	.684	.635	.540	.636	.229	.395	.290
16	Crotch Height	*.088	.494	.240	.077	.311	.197	.282	.945	.824	.841
17	Crotch Length, O	.368	.525	.432	.449	.510	.199	.661	.377	.543	.475
18	Crotch Lgth Pos, O	.144	.404	.265	.224	.283	*.101	.449	.255	.416	.397
19	Elbow Circ	.636	.345	.619	.838	.710	.397	.730	.396	.536	.402
20	Elbow Rest Height	.013	.737	.182	.074	*.101	.054	.161	071	076	130
21	Eye Height, Sitting	.018	.861	.337	.077	.307	.141	.318	.496	.462	.435
22	Forearm Circ, Flex	.559	.255	.578	.829	.667	.358	.646	.312	.434	.303
23	Forearm-Forearm B	.638	.297	.474	.690	.803	.404	.669	.327	.449	.347
24	Forearm-Hand Lgth	.186	.448	.282	.209	.406	.239	.362	.849	.772	.764
25	Functional Leg Lgth	.344	.510	.379	.305	.473	.277	.528	.932	.923	.901
26	Gluteal Furrow Hght	.140	.487	.237	.127	.344	.235	.293	.957	.816	.825
27	Head Circ	.244	.335	.330	.308	.404	.254	.345	.417	.417	.371
28	Hip Breadth, Sitting	.624	.330	.545	.624	.570	.309	.920	.354	.570	.466
29	Interscye II	.385	.309	.357	.417	.674	.291	.458	.391	.445	.372
30	Knee Circ	.611	.341	.699	.690	.589	.341	.809	.419	.592	.444
	I/aaa liiainhi Adid	470	460	204	120	245	222	.334	.925	.813	.816
31	Knee Height, Mid	.170	.469	.281	.139	.345	.223 .261	.421	.935	.853	.838
32	Knee Height, Sitting	.223	.499	.366	.214	.407	.139	.421	.444	.349	.327
33	Lateral Malleolus H	.056	.353	.243	.061	.132		.817	.327	.518	.364
34	Lower Thigh Circ	.609	.289	.699	.722	.586	.312		.228	.357	.275
35	Neck Bustpt Lgth	.494	.260	.334	.461	.524	.477	.504 .581	.334	.397	.282
36	Neck Circ	.561	.314	.487	.635	.643	.426		.388	.434	.338
37	Neck Circ, Base	.487	.347	.470	.537	.622	.385 .205	.552 .339	.300 .898	.822	.820
38	Ovrhd Engrtp Rch E	.115	.633	.292		.392	.205	.382	.779	.729	.715
39	Ovrhd Fngrtp Rch S	.129	.709	.306		.458	.215	.302	.883	.699	.754
40 * C	Popliteal Height orrelation not significant	015	.441	.149	050	.217	. 140	. 130	.003	.033	.1 5-4
U	orrelation not significant	at $p \ge .00$									

Female Correlation Coefficients

		1	2	3	4	5	6	7	8	9	10
41	Scye Circ	.624	.397	.480	.757	.722	.446	.688	.368	.486	.375
42	Scye Depth	.374	.235	.373	.367	.372	.213	.462	.334	.400	.334
43	Shoulder Circ	.661	.306	.465	.737	.924	.465	.718	.452	.571	.460
44	Shoulder Lgth	.062	*.099	.153	.049	.332	.128	.141	.263	.288	.271
45	Sitting Height	.044	.874	.352	*.096	.329	.163	.335	.518	.480	.449
46	Slv Lgth Spine-El	.254	.499	.380	.282	.588	.304	.440	.713	.722	.685
47	Slv Lgth Spine-Sc	.282	.341	.318	.330	.606	.328	.376	.336	.415	.352
48	Slv Lgth Spine-Wr	.250	.500	.359	.282	.560	.305	.448	.829	.802	.774
49	Sleeve Outseam	.134	.497	.240	.130	.363	.211	.328	.847	.770	.774
50	Span	.125	.496	.264	.131	.430	.219	.322	.872	.784	.784
51	Stature	.127	.734	.344	.136	.390	.232	.382	.881	.803	.796
52	Tenth Rib Hght	.143	.633	.298	.137	.365	.206	.353	.925	.827	.822
53	Thigh Circ	.682	.270	.560	.765	.671	.349	.928	.323	.559	.424
54	Thigh Clearance	.598	.218	.452	.687	.622	.348	.760	.288	.478	.358
55	Thumbtip Reach	.233	.464	.295	.192	.402	.242	.383	.822	.773	.761
56	Vert Trnk Circ USA	.519	.743	.526	.511	.624	.371	.706	.520	.632	.540
57	Waist Back Lgth, O	.373	.568	.334	.249	.337	.234	.421	.450	.444	.390
58	Waist Circ, NI	.849	.177	.431	.732	.719	.497	.722	.324	.476	.363
59	Waist Circ, O	.891	.144	.411	.688	.647	.457	.747	.294	.449	.343
60	Waist Front Lgth, O	.425	.567	.311	.294	.428	.311	.407	.352	.382	.317
	•				0 .				.002	.002	.0
61	Waist Hght, NI	.218	.611	.308	.208	.417	.237	.415	.905	.836	.821
62	Waist Hght Sit, NI	.240	.562	.259	.208	.335	.237 .148	.388	.312	.325	.260
63	Waist Hght Sit, O	.160	.580	.376	.319	.417	.142	.509	.340	.421	.367
64	Waist Hip Lgth	359	.387	.051	191	055	108	006	.061	.144	.165
65	Waist NI Waist O Lg	.442	.103	.120	.310	.259	.197	.294	.096	.157	.092
66	Weight	.759	.448	.642	.796	.806	.478	.899	.541	.721	.587
67	Wrist Cen Grip Lgth	.199	.246	.249	.244	.282	.118	.263	.358	.315	.272
68	Wrist Circ	.391	.419	.618	.553	.562	.337	.513	.431	.485	.393
69	Wrist Wall Lgth	.223	.445	.274	.180	.385	.237	.365	.803	.748	.740
70	Wrist Wall Lgth, Ex	.202	.448	.300	.181	.375	.211	.350	.806	.710	.705
	rrelation not significant a										55

Female Correlation Coefficients

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	11 .480 .247 .772 .650 .546 .284 .672 .274 .420	12 .208 .373 .173 .187 .341 .225 .359 .843 .757	13 .739 .263 .438 .705 .778 .599 .686 .337 .466	14 .689 .310 .443 .741 .854 .484 .696 .378 .498 .385	15 .746 .150 .363 .684 .635 .540 .636 .229 .395 .289	16 *.088 .494 .240 .077 .311 .197 .282 .945 .824	17 .368 .525 .432 .449 .510 .199 .661 .377 .544	18 .144 .404 .265 .224 .283 .101* .449 .255 .416 .397	19 .636 .345 .619 .838 .710 .397 .730 .396 .536	20 .013 .737 .182 .074 .101 .054 .161 071 077
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye. Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.216 .525 .549 .470 .207 .474 .281 .680	.216 .268 .301 .191 .832 .311 .221 .362 128	.525 .268 .912 .898 .198 .443 .176 .714	.549 .301 .912 .791 .254 .493 .235 .747 .134	.470 .191 .898 .791 *.097 .389 .158 .650 .066	.207 .832 .198 .254 *.097 .302 .251 .296 *092	.474 .311 .443 .493 .389 .302 .774 .533 .322	.281 .221 .176 .235 .158 .251 .774	.680 .362 .714 .747 .650 .296 .533 .315	.103*128 .115 .134 .066092 .322 .220 .123
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.231 .661 .548 .268 .375 .214 .316 .666 .379	.369 .280 .274 .783 .808 .825 .357 .332 .325 .443	.160 .669 .776 .302 .416 .271 .361 .572 .551	.234 .708 .803 .350 .448 .315 .381 .564 .637	.058 .614 .669 .215 .317 .165 .319 .532 .432	.522 .212 .218 .853 .907 .962 .379 .263 .344 .342	.524 .474 .452 .354 .488 .320 .329 .593 .385 .549	.456 .259 .206 .272 .354 .227 .181 .405 .239 .354	.297 .919 .708 .433 .482 .328 .403 .630 .496 .767	.560 .090* .148 118 048 083 .103* .161 .061 .106*
31 32 33 34 35 36 37 38 39 40	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.259 .346 .195 .795 .396 .481 .450 .266 .288 .091	.840 .860 .376 .351 .158 .259 .288 .769 .650	.267 .323 .144 .592 .665 .690 .632 .260 .299 .117	.308 .369 .158 .600 .562 .698 .650 .328 .378	.175 .227 *.091 .566 .616 .604 .538 .147 .187	.937 .943 .418 .240 .137 .227 .302 .928 .798	.350 .401 .230 .540 .347 .441 .431 .438 .496 .239	.286 .306 .217 .335 .204 .198 .207 .359 .403 .218	.343 .428 .227 .757 .465 .697 .640 .357 .385 .182	103 079 .095* .128 .150 .147 .130 .036 .176 126

Female Correlation Coefficients

41 42 43 44 45 46 47 48 49 50	Scye Circ Scye Depth Shoulder Circ Shoulder Lgth Sitting Height Slv Lgth Spine-El Slv Lgth Spine-Sc Slv Lgth Spine-Wr Sleeve Outseam Span	11 .548 .334 .580 .135 .247 .382 .345 .364 .228	12 .276 .265 .368 .209 .383 .596 .262 .723 .757	13 .801 .406 .824 .110 .190 .428 .461 .419 .261	14 .822 .382 .905 .170 .261 .497 .535 .481 .304	15 .713 .374 .703 .053 .081 .310 .360 .303 .169 .157	16 .241 .274 .345 .285 .536 .717 .327 .826 .866	17 .501 .342 .505 .150 .535 .430 .305 .429 .364	18 .244 .206 .275 .162 .451 .323 .188 .311 .293 .293	19 .795 .430 .762 .111 .318 .484 .410 .498 .366 .375	20 .202 .025 .058 095 .570 070 .110 111 152 133
51 52 53 54 55 56 57 58 59 60	Stature Tenth Rib Hght Thigh Circ Thigh Clearance Thumbtip Reach Vert Trnk Circ USA Waist Back Lgth, O Waist Circ, NI Waist Circ, O Waist Front Lgth, O	.279 .265 .726 .590 .281 .523 .268 .529 .490 .299	.737 .796 .310 .270 .736 .423 .369 .281 .258	.272 .267 .667 .613 .339 .635 .357 .863 .785 .468	.332 .329 .683 .649 .378 .646 .343 .817 .729 .471	.150 .168 .627 .584 .237 .544 .297 .805 .749 .399	.896 .934 .210 .189 .825 .445 .395 .184 .139 .291	.498 .469 .600 .484 .378 .702 .194 .404 .290 .240	.402 .362 .355 .248 .296 .472 .046 .147 .032	.384 .368 .731 .640 .415 .665 .394 .715 .654	.198 .076 .137 .079 134 .479 .349 .037 .049
61 62 63 64 65 66 67 68 69 70 * Co	Waist Hght, NI Waist Hght Sit, NI Waist Hght Sit, O Waist Hip Lgth Waist NI Waist O Lg Weight Wrist Cen Grip Lgth Wrist Circ Wrist Wall Lgth Wrist Wall Lgth, Ex rrelation not significant a	.297 .265 .348 008 .186 .748 .231 .520 .259 .270	.792 .262 .251 .088 .110 .471 .317 .378 .708	.314 .242 .285 217 .310 .824 .235 .533 .331	.371 .303 .388 144 .290 .836 .259 .564 .373 .369	.223 .234 .238 242 .343 .752 .157 .456 .229 .231	.904 .269 .317 .242 .021 .431 .303 .373 .803 .787	.464 .437 .734 .456 056 .647 .246 .478 .363 .371	.354 .322 .573 .538 154 .375 .134 .325 .276 .254	.418 .360 .401 077 .288 .848 .313 .768 .393 .390	.069 .425 .407 .225 *.101 .168 .064 .140 146 120

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Female	Correlation	Coefficients
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1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	21 .018 .861 .337 .077 .307 .141 .318 .496 .462 .435	22 .559 .255 .578 .829 .667 .358 .646 .312 .434 .303	23 .638 .297 .474 .690 .803 .404 .669 .327 .449 .347	24 .186 .448 .282 .209 .406 .239 .362 .849 .772 .764	25 .344 .510 .379 .305 .473 .277 .528 .932 .923 .901	26 .140 .487 .237 .127 .344 .235 .293 .957 .816 .825	27 .244 .335 .330 .308 .404 .254 .345 .417 .417	28 .624 .330 .545 .624 .570 .309 .920 .354 .570 .446	29 .385 .309 .357 .417 .674 .291 .458 .391 .445	30 .611 .341 .699 .690 .589 .341 .809 .419 .592
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.231 .369 .160 .134 .066 092 .524 .456 .297 .560	.661 .280 .669 .708 .614 .212 .474 .259 .919	.548 .274 .776 .803 .669 .218 .452 .206 .708 .148	.268 .783 .302 .350 .215 .853 .354 .272 .433 118	.375 .808 .416 .448 .317 .907 .488 .354 .482 048	.214 .825 .271 .315 .165 .962 .320 .227 .328 083	.316 .357 .361 .381 .319 .379 .329 .181 .403	.666 .332 .572 .564 .532 .263 .593 .405 .630	.379 .325 .551 .637 .432 .344 .385 .239 .496	.771 .443 .597 .611 .567 .342 .549 .354 .767
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.199 .203 .462 .523 .501 .298 .313 .352 .302	.199 .681 .350 .378 .248 .394 .545 .460	.203 .681 .303 .400 .260 .356 .558 .526	.462 .350 .303 .830 .847 .426 .303 .401 .430	.523 .378 .400 .830 .908 .437 .489 .427 .525	.501 .248 .260 .847 .908 .400 .257 .366 .344	.298 .394 .356 .426 .437 .400 .282 .336 .380	.313 .545 .558 .303 .489 .257 .282 .398 .781	.352 .460 .526 .401 .427 .366 .336 .398	.302 .693 .587 .430 .525 .344 .380 .781 .423
31 32 33 34 35 36 37 38 39 40	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.495 .521 .362 .240 .236 .235 .298 .679 .751 .491	.262 .334 .161 .694 .404 .698 .629 .262 .297 *.103	.276 .331 .129 .591 .513 .661 .606 .286 .322 .132	.855 .886 .329 .338 .191 .339 .408 .867 .791	.904 .929 .402 .441 .330 .378 .426 .897 .788 .824	.930 .932 .416 .246 .181 .286 .348 .910 .782	.387 .439 .189 .352 .271 .461 .453 .422 .437 .340	.300 .387 .175 .797 .445 .437 .414 .368 .342 .110	.392 .420 .207 .390 .397 .493 .482 .455 .455	.392 .502 .254 .967 .428 .555 .528 .382 .393 .171

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Female Correlation Coefficients

41 Scye Circ .359 .754 .735 .345 .441 .292 .388 .566 .490 .624 42 Scye Depth .345 .363 .374 .298 .421 .306 .241 .445 .395 .406 43 Shoulder Circ .295 .717 .771 .437 .518 .388 .412 .589 .698 .623 44 Shoulder Lgth .342 .073 *.099 .279 .303 .284 .125 .131 .441 .113 45 Sitting Height .977 .224 .233 .474 .545 .519 .356 .330 .371 .315 46 Slv Lgth Spine-El .581 .397 .453 .689 .740 .705 .418 .405 .571 .467 47 Sly Lgth Spine-Sc .383 .388 .481 .323 .363 .335 .327 .325 .607 .344 48 Sly Lgth Spine-Wr .558 .411 .429 .855 .841 <td< th=""><th></th><th></th><th>21</th><th>22</th><th>23</th><th>24</th><th>25</th><th>26</th><th>27</th><th>28</th><th>29</th><th>30</th></td<>			21	22	23	24	25	26	27	28	29	30
42 Scye Depth .345 .363 .374 .298 .421 .306 .241 .445 .395 .406 43 Shoulder Circ .295 .717 .771 .437 .518 .388 .412 .589 .698 .623 44 Shoulder Lgth .342 .073 *.099 .279 .303 .284 .125 .131 .441 .113 45 Sitting Height .977 .224 .233 .474 .545 .519 .356 .330 .371 .315 46 Sly Lgth Spine-El .581 .397 .453 .689 .740 .705 .418 .405 .571 .467 47 Sly Lgth Spine-Sc .383 .388 .481 .323 .363 .335 .327 .325 .607 .344 48 Sly Lgth Spine-Wr .558 .411 .429 .855 .841 .820 .444 .406 .539 .483 49 Sleeve Outseam .509 .275 .272 .885 .833	41	Scve Circ										
43 Shoulder Circ		•										
44 Shoulder Lgth .342 .073 *.099 .279 .303 .284 .125 .131 .441 .113 45 Sitting Height .977 .224 .233 .474 .545 .519 .356 .330 .371 .315 46 Slv Lgth Spine-El .581 .397 .453 .689 .740 .705 .418 .405 .571 .467 47 Sly Lgth Spine-Sc .383 .388 .481 .323 .363 .335 .327 .325 .607 .344 48 Sly Lgth Spine-Wr .558 .411 .429 .855 .841 .820 .444 .406 .539 .483 49 Sleeve Outseam .509 .275 .272 .885 .833 .851 .398 .293 .383 .389 50 Span .551 .292 .303 .934 .854 .878 .423 .281 .429 .380												
45 Sitting Height 977 224 233 474 545 519 356 330 371 315 46 Slv Lgth Spine-El 581 397 453 689 740 705 418 405 571 467 47 Slv Lgth Spine-Sc 383 388 481 323 363 335 327 325 607 344 48 Slv Lgth Spine-Wr 558 411 429 855 841 820 444 406 539 483 49 Sleeve Outseam 509 275 272 885 833 851 398 293 383 389 50 Span 551 292 303 934 854 878 423 281 429 380		Shoulder Lath										
46 Slv Lgth Spine-El .581 .397 .453 .689 .740 .705 .418 .405 .571 .467 47 Slv Lgth Spine-Sc .383 .388 .481 .323 .363 .335 .327 .325 .607 .344 48 Slv Lgth Spine-Wr .558 .411 .429 .855 .841 .820 .444 .406 .539 .483 49 Sleeve Outseam .509 .275 .272 .885 .833 .851 .398 .293 .383 .389 50 Span .551 .292 .303 .934 .854 .878 .423 .281 .429 .380		-										
47 Siv Lgth Spine-Sc .383 .388 .481 .323 .363 .335 .327 .325 .607 .344 48 Siv Lgth Spine-Wr .558 .411 .429 .855 .841 .820 .444 .406 .539 .483 49 Sleeve Outseam .509 .275 .272 .885 .833 .851 .398 .293 .383 .389 50 Span .551 .292 .303 .934 .854 .878 .423 .281 .429 .380												
48 Slv Lgth Spine-Wr .558 .411 .429 .855 .841 .820 .444 .406 .539 .483 49 Sleeve Outseam .509 .275 .272 .885 .833 .851 .398 .293 .383 .389 50 Span .551 .292 .303 .934 .854 .878 .423 .281 .429 .380		• •										
49 Sleeve Outseam .509 .275 .272 .885 .833 .851 .398 .293 .383 .389 50 Span .551 .292 .303 .934 .854 .878 .423 .281 .429 .380												
50 Span .551 .292 .303 .934 .854 .878 .423 .281 .429 .380												
51 Stature 803 278 289 798 883 884 438 365 444 403	30	opu	.551	.232	.505	.504	.054	.070	.423	.201	.429	.300
51 Stature 803 278 289 798 883 884 438 365 444 403												
	51	Stature	.803	.278	.289	.798	.883	.884	.438	.365	.414	.403
52 Tenth Rib Hght .649 .279 .276 .828 .911 .925 .420 .337 .398 .404	52	Tenth Rib Hght	.649	.279	.276	.828	.911					
53 Thigh Circ .215 .673 .641 .290 .450 .240 .343 .878 .422 .825	53	Thigh Circ	.215	.673	.641							
54 Thigh Clearance .170 .597 .588 .291 .389 .210 .323 .641 .391 .685	54	Thigh Clearance		.597								
55 Thumbtip Reach .492 .323 .323 .871 .828 .817 .424 .343 .462 .435	55	Thumbtip Reach	.492									
56 Vert Trnk Circ USA .695 .567 .598 .472 .628 .459 .427 .643 .467 .628	56	Vert Trnk Circ USA										
57 Waist Back Lgth, O .577 .302 .336 .399 .497 .420 .305 .416 .360 .386	57	Waist Back Lgth, O										
58 Waist Circ, NI .074 .668 .754 .299 .412 .253 .329 .605 .479 .630	58	Waist Circ, NI										
59 Waist Circ, O .047 .579 .694 .221 .396 .205 .276 .661 .415 .618	59	Waist Circ, O	.047									
60 Waist Front Lgth, O .588 .315 .381 .288 .419 .318 .286 .396 .313 .366	60	Waist Front Lgth, O										
61 Waist Hght, NI .630 .320 .335 .814 .897 .904 .410 .389 .420 .444		- '										
62 Waist Hght Sit, NI .548 .295 .302 .273 .320 .285 .215 .358 .310 .362		- ·										
63 Waist Hght Sit, O .593 .356 .350 .311 .387 .305 .278 .434 .310 .426		-										
64 Waist Hip Lgth .477 *103122 .180 .163 .177 .054016 .037017		• •										
65 Waist NI Waist O Lg .054 .237 .288 .064 .125 .065 *.091 .275 .177 .262		<u> </u>										
66 Weight .396 .775 .777 .509 .657 .464 .476 .813 .574 .846		-										
67 Wrist Cen Grip Lgth .241 .283 .278 .395 .346 .328 .171 .235 .209 .252												
68 Wrist Circ .417 .722 .517 .524 .476 .398 .423 .421 .436 .599												
69 Wrist Wall Lgth .475 .303 .315 .830 .809 .797 .406 .327 .455 .413		•										
70 Wrist Wall Lgth, Ex .479 .312 .315 .799 .798 .790 .391 .315 .435 .405		-		.312	.315	.799	.798	.790	.391	.315	.435	.405

1	Ab Ext Depth, S	31 .170	32 .223	33 .056	34 .609	35 .494	36 .561	37 .487	38 .115	39 .129	40 015
2	Acromial Ht, Sitting	.469	.499	.353	.289	.260	.314	.347	.633	.709	.441
3	Ankle Circ	.281	.366	.243	.699	.334	.469	.470	.292	.306	.149
4	Biceps C Flex	.139	.214	.061	.722	.461	.635	.537	.110	.150	050
5	Bideltoid Bdth S	.345	.407	.132	.586	.524	.643	.622	.392	.458	.217
6	Bustpt-Bustpt Bdth	.223	.261	.139	.312	.477	.426	.385	.205	.215	.148
7	Buttock Circ	.334	.421	.179	.817	.504	.581	.552	.339	.382	.138
8	Buttock Height	.925	.935	.444	.327	.227	.334	.388	.898	.779	.883
9	Buttock-Knee Lgth	.813	.853	.349	.518	.357	.397	.434	.822	.729	.699
10	Buttock-Pop Lgth	.816	.838	.327	.364	.275	.282	.338	.820	.715	.754
10	Datable F op Egui	.010	.000	.027	.004	.210	.202	.000	.020		., .
11	Calf Circumference	.259	.346	.195	.795	.396	.481	.450	.266	.288 .650	*.091 .785
12	Calf Height	.840	.860	.376	.351	.158	.259	.288	.769		.765 .117
13	Chest Circ	.267	.323	.144	.592	.665	.690	.632	.260	.299	
14	Chest Circ at Scye	.308	.369	.158	.600	.562	.698	.650	.328	.378	.172
15	Chest Depth	.175	.227	.091	.566	.616	.604	.538	.147	.187	.011
16	Crotch Height	.937	.943	.418	.240	.137	.228	.302	.928	.798	.926 .239
17	Crotch Length, O	.350	.401	.230	.540	.347	.441	.431	.438	.496	.239 .218
18	Crotch Lgth Pos, O	.286	.306	.217	.335	.204	.198	.207	.359	.403	.210
19	Elbow Circ	.343	.428	.227	.757	.465	.697	.640	.357	.385	126
20	Elbow Rest Height	*103	079	.095	.128	.150	.147	.130	.036	.176	120
21	Eye Height, Sitting	.495	.521	.362	.240	.237	.235	.298	.679	.751	.491
22	Forearm Circ, Flex	.262	.334	.161	.694	.404	.698	.629	.262	.297	.103
23	Forearm-Forearm B	.276	.331	.129	.591	.513	.661	.606	.286	.322	.132
24	Forearm-Hand Lgth	.855	.886	.329	.338	.191	.339	.408	.867	.791	.828
25	Functional Leg Lgth	.904	.929	.402	.441	.33	.378	.426	.897	.788	.824
26	Gluteal Furrow Hght	.930	.932	.416	.246	.181	.286	.348	.910	.782	.915
27	Head Circ	.387	.439	.189	.352	.271	.461	.453	.422	.437	.340 .110
28	Hip Breadth, Sitting	.300	.387	.175	.797	.445	.437	.414	.312	.342	.312
29	Interscye II	.392	.420	.207	.390	.397	.493	.482	.410	. 45 5 . 39 3	.312
30	Knee Circ	.392	.502	.254	.967	.428	.555	.528	.382	.393	.17
31	Knee Height, Mid		.967	.446	.282	.198	.281	.331	.907	.777	.921
32	Knee Height, Sitting	.967		.441	.408	.223	.339	.394	.920	.803	.913
33	Lateral Malleolus H	.446	.441		.201	.109	.141	.165	.399	.369	.417
34	Lower Thigh Circ	.282	.408	.201		.425	.546	.504	.279	.305	.062
35	Neck Bustpt Lgth	.198	.223	.109	.425		.467	.411	.219	.272	.072
36	Neck Circ	.281	.339	.141	.546	.467	_	.881	.284	.320	.164
37	Neck Circ, Base	.331	.394	.165	.504	.411	.881	•	.364	.393	.246
38	Ovrhd Fngrtp Rch E	.907	.920	.399	.279	.219	.284	.364		.919	.885
39	Ovrhd Fngrtp Rch S	.776	.803	.369	.305	.272	.320	.393	.919	=0.1	.761
40	Popliteal Height	.921	.913	.417	.062	.072	.164	.246	.885	.761	.761
* Co	orrelation not significant	at $p \le .05$									

Female Correlation Coefficients

41 42 43 44 45 46 47 48 49 50	Scye Circ Scye Depth Shoulder Circ Shoulder Lgth Sitting Height SIv Lgth Spine-El SIv Lgth Spine-Sc SIv Lgth Spine-Wr Sleeve Outseam Span	31 .287 .312 .391 .310 .504 .711 .356 .820 .842 .876	32 .351 .348 .447 .297 .534 .739 .367 .851 .867	33 .204 .150 .170 .078 .357 .345 .173 .361 .359	34 .624 .395 .609 .077 .257 .380 .295 .392 .289	35 .541 .391 .525 .241 .255 .365 .379 .321 .183 .201	36 .722 .393 .682 .047 .274 .414 .425 .418 .290	37 .661 .381 .656 .050 .330 .465 .417 .477 .369	38 308 340 416 358 689 802 416 879 890	39 .354 .352 .465 .393 .760 .791 .441 .836 .814	40 .139 .223 .255 .292 .501 .659 .272 .772 .835
51 52 53 54 55 56 57 58 59 60	Stature Tenth Rib Hght Thigh Circ Thigh Clearance Thumbtip Reach Vert Trnk Circ USA Waist Back Lgth, O Waist Circ, NI Waist Circ, O Waist Front Lgth, O	.868 .914 .250 .235 .822 .476 .399 .259 .213	.889 .926 .347 .317 .848 .531 .445 .311 .268	.452 .448 .129 .106 .355 .328 .249 .097 .092 .224	.312 .307 .851 .690 .341 .599 .359 .628 .622	.258 .205 .464 .403 .224 .527 .327 .559 .527 .451	.312 .302 .563 .568 .358 .562 .362 .691 .603	.379 .353 .515 .505 .412 .557 .398 .625 .545	.945 .940 .250 .227 .874 .588 .478 .216 .152 .409	.890 .856 .291 .266 .777 .660 .512 .234 .165 .476	.847 .882 .043 .058 .789 .346 .336 .089 .031 .228
61 62 63 64 65 66 67 68 69 70 * Co	Waist Hght, NI Waist Hght Sit, NI Waist Hght Sit, O Waist Hip Lgth Waist NI Waist O Lg Weight Wrist Cen Grip Lgth Wrist Circ Wrist Wall Lgth Wrist Wall Lgth, Ex rrelation not significant a	.891 .279 .312 .216 .061 .483 .320 .419 .796 .769 t p ≤ .05	.904 .300 .352 .205 .079 .568 .333 .484 .818	.425 .212 .211 .080 .054 .244 .208 .283 .342 .323	.351 .331 .399 058 .265 .832 .241 .556 .320	.233 .182 .203 064 .192 .594 .198 .374 .216	.336 .294 .337 *101 .230 .716 .236 .591 .345 .362	.379 .274 .332 046 .185 .676 .220 .567 .400	.910 .365 .426 .346 .036 .499 .325 .467 .823	.827 .439 .487 .365 .067 .523 .310 .502 .755	.842 .205 .243 .262 035 .291 .280 .341 .766 .745

Female Correlation Coefficients

1 2 3 4 5 6	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth	41 .624 .397 .480 .757 .722 .446	42 .374 .235 .373 .367 .372 .213	43 .661 .306 .465 .737 .924 .465	.062 .099 .153 .049 .332	45 .044 .874 .352 *.096 .329 .163	46 .254 .499 .380 .282 .588 .304	47 .282 .341 .318 .330 .606	48 .250 .500 .359 .282 .560	49 .134 .497 .240 .130 .363 .211	50 .125 .496 .264 .131 .430 .219
7	Buttock Circ	.688	.462	.718	.141	.335	.440	.376	.448	.328	.322
8	Buttock Height	.368	.334	.452	.263	.518	.713	.336	.829	.847	.872
9	Buttock-Knee Lgth	.486	.400	.571	.288	.480	.722	.415	.802	.770	.784
10	Buttock-Pop Lgth	.375	.334	.460	.271	.449	.685	.352	.774	.774	.784
11	Calf Circumference	.548	.334	.580	.135	.247	.382	.345	.364	.228	.253
12	Calf Height	.276	.265	.368	.209	.383	.596	.262	.723	.757	.770 .279
13	Chest Circ Chest Circ at Scye	.801	.406	.824 .905	.110	.190 .261	.428 .497	.461 .535	.419 .481	.261 .304	.341
14 15	Chest Depth	.822 .713	.382 .374	.703	.170 .053	.081	.310	.360	.303	.169	.157
16	Crotch Height	.713	.274	.705	.285	.536	.717	.327	.826	.866	.890
17	Crotch Length, O	.501	.342	.505	.150	.535	.430	.305	.429	.364	.366
18	Crotch Lgth Pos, O	.244	.206	.275	.162	.451	.323	.188	.311	.293	.293
19	Elbow Circ	.795	.430	.762	.111	.318	.484	.410	.498	.366	.375
20	Elbow Rest Height	.202	.025	.058	*095	.570	070	.110	111	152	133
21	Eye Height, Sitting	.259	.345	.295	.342	.977	.581	.383	.558	.509	.551
22	Forearm Circ, Flex	.754	.363	.717	.073	.224	.397	.388	.411	.275	.292
23	Forearm-Forearm B	.735	.374	.771	*.099	.233	.453	.481	.429	.272	.303
24	Forearm-Hand Lgth	.345	.298	.437	.279	.474	.689	.323	.855	.885	.934
25	Functional Leg Lgth	.441	.421	.518	.303	.545	.740	.363	.841	.833	.854
26	Gluteal Furrow Hght	.292	.306	.388	.284	.519	.705	.335	.820	.851	.878 .423
27	Head Circ Hip Breadth, Sitting	.388	.241 .445	.412 .589	.125 .131	.356 .330	.418 .405	.327 .325	.444 .406	.398 .293	. 4 23
28 29	Interscye II	.566 .490	.395	.698	.131	.330	.403	.607	.539	.383	.429
30	Knee Circ	.624	.406	.623	.113	.315	.467	.344	.483	.389	.380
31	Knee Height, Mid	.287	.312	.391	.310	.504	.711	.356	.820	.842	.876
32	Knee Height, Sitting	.351	.348	.447	.297	.534	.739	.367	.851	.867	.896
33	Lateral Malleolus H	.204	.150	.170	.078	.357	.345	.173	.361	.359	.352
34	Lower Thigh Circ	.624	.395	.609	.077	.257	.380	.295	.392	.289	.280
35	Neck Bustpt Lgth	.541	.391	.525	.241	.255	.365	.379	.321	.183	.201
36	Neck Circ	.722	.393	.682	.047	.274	.414	.425	.418	.290	.310
37	Neck Circ, Base	.661	.381	.656	.059	.330	.465	.417	.477	.369	.387
38	Ovrhd Fngrtp Rch E	.308	.340	.416	.358	.689	.802	.416	.879	.890	.930
39	Ovrhd Fngrtp Rch S	.354	.352	.465	.393	.760	.791	.441	.836	.814	.867
40	Popliteal Height	.139	.223	.255	.292	.501	.659	.272	.772	.835	.867
* Cc	prrelation not significant a	at $p \leq .05$									

Female Correlation Coefficients

		41	42	43	44	45	46	47	48	49	50
41	Scye Circ		.407	.761	033	.283	.428	.379	.435	.332	
42	Scye Depth	.407		.428	.390	.364	.425	.297	.424	.313	.314
43	Shoulder Circ	.761	.428		.333	.316	.601	.598	.585	.393	.336
44	Shoulder Lgth	033	.390	.333		.335	.470	.417	.420	.234	.448
45	Sitting Height	.283	.364	.316	.335		.590	.385	.570	.521	.381
46	Slv Lgth Spine-El	.428	.425	.601	.470	.590		.722	.946	.770	.560
47	Slv Lgth Spine-Sc	.379	.297	.598	.417	.385	.722		.610	.317	.814
48	Slv Lgth Spine-Wr	.435	.424	.585	.420	.570	.946	.610		.881	.401
49	Sleeve Outseam	.332	.313	.393	.234	.521	.770	.317	.881		.919
50	Span	.314	.336	.448	.381	.560	.814	.401	.919	.934	.934
51	Stature	.337	.384	.408	.354	.823	.764	.407	.829	.822	.858
52	Tenth Rib Hght	.326	.327	.397	.300	.664	.735	.363	.828	.842	.869
53	Thigh Circ	.674	.403	.694	*.087	.236	.360	.334	.368	.248	.240
54	Thigh Clearance	.636	.278	.646	.048	.180	.321	.338	.340	.231	.231
55	Thumbtip Reach	.363	.354	.451	.301	.509	.755	.364	.859	.880	.891
56	Vert Trnk Circ USA	.658	.469	.633	.210	.722	.583	.438	.576	.467	.492
57	Waist Back Lgth, O	.378	.645	.368	.253	.609	.437	.289	.456	.391	.405
58	Waist Circ, NI	.767	.407	.768	.068	*.100	.357	.366	.430	.230	.244
59	Waist Circ, O	.702	.432	.690	.062	.081	.295	.305	.302	.170	.168
60	Waist Front Lgth, O	.449	.352	.440	.233	613	.398	.337	.378	.277	.324
00	VValst i Tont Egin, O	.449	.302	.440	.233	013	.390	.331	.370	.211	.324
61	Waist Hght, NI	.371	.365	.452	.297	.644	.734	.401	.821	.818	.841
62	Waist Hght Sit, NI	.338	.272	.343	.146	.555	.346	.317	.333	.267	.270
63	Waist Hght Sit, O	.391	.228	.394	.130	.597	.395	.326	.379	.320	.325
64	Waist Hip Lgth	146	.020	099	.196	.458	.239	.131	.214	.235	.247
65	Waist NI Waist O Lg	.308	.203	.292	.010	.064	*.101	.165	*.096	.027	.018
66	Weight	.811	.506	.845	.194	.425	.591	.503	.607	.458	.480
67	Wrist Cen Grip Lgth	.267	.214	.279	.170	.255	.252	.125	.311	.275	.345
68	Wrist Circ	.620	.365	.596	.206	.430	.534	.421	.561	.455	.487
69	Wrist Wall Lgth	.360	.353	.439	.290	.493	.745	.353	.845	.867	.865
70	Wrist Wall Lgth, Ex	.371	.400	.435	.255	.505	.729	.310	.830	.850	.848
. * Co	rrelation not significant a	at $p \le .05$									

¹⁸³

Female Correlation Coefficients

* Correlation not significant at $p \le .05$

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	51 .127 .734 .344 .136 .390 .232 .382 .881 .803 .796	52 .143 .633 .298 .137 .365 .206 .353 .925 .827	53 .682 .270 .560 .765 .671 .349 .928 321 .559	54 .598 .218 .452 .687 .622 .348 .760 .288 .478 .358	55 .233 .464 .295 .192 .402 .242 .383 .822 .773 .761	56 .519 .743 .526 .511 .624 .371 .706 .520 .632	57 .373 .568 .334 .249 .337 .234 .421 .450 .444	58 .849 .177 .431 .732 .719 .497 .722 .324 .476 .363	59 .891 .144 .411 .688 .647 .457 .747 .294 .449	60 .425 .567 .311 .294 .428 .311 .407 .352 .382 .317
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.279 .737 .272 .332 .150 .896 .498 .402 .384 .198	.265 .796 .267 .329 .168 .934 .469 .362 .368	.726 .310 .667 .683 .627 .210 .600 .355 .731	.590 .270 .613 .649 .584 .189 .484 .248 .640	.281 .736 .339 .378 .237 .825 .378 .296 .415 134	.523 .423 .635 .646 .544 .445 .702 .472 .665 .479	.268 .369 .357 .343 .293 .395 .194 .046 .394 .349	.529 .281 .863 .817 .805 .184 .404 .147 .715	.490 .258 .785 .729 .749 .139 .290 .032 .654	.299 .270 .468 .471 .399 .291 .240 .080 .404 .423
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.803 .278 .289 .798 .883 .884 .438 .365 .414	.649 .279 .276 .828 .911 .925 .420 .337 .398 .404	.215 .673 .641 .290 .450 .240 .343 .879 .422	.170 .597 .588 .291 .389 .210 .323 .641 .391	.492 .323 .323 .871 .828 .817 .424 .343 .462 .435	.695 .567 .598 .472 .628 .459 .427 .643 .467	.577 .302 .336 .399 .497 .420 .305 .416 .360	.074 .668 .754 .299 .412 .253 .329 .605 .479	.047 .579 .694 .221 .396 .205 .276 .661 .415	.588 .315 .381 .288 .419 .318 .286 .396 .313
31 32 33 34 35 36 37 38 39	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.868 .889 .452 .312 .258 .312 .379 .945 .890 .847	.914 .926 .448 .307 .205 .302 .353 .940 .856	.250 .347 .129 .851 .464 .563 .515 .250 .291	.235 .317 .106 .690 .403 .568 .505 .227 .266	.822 .848 .355 .341 .224 .358 .412 .847 .777 .789	.476 .531 .328 .599 .527 .562 .557 .588 .660 .346	.399 .446 .249 .359 .327 .362 .398 .478 .512	.259 .311 *.097 .628 .559 .691 .625 .216 .234	.213 .268 *.092 .622 .527 .603 .545 .152 .165	.313 .343 .224 .339 .451 .335 .277 .409 .476 .228

¹⁸⁴

Female Correlation Coefficients

41 42 43	Scye Circ Scye Depth Shoulder Circ	51 .337 .384 .409	52 .326 .327 .397	53 .674 .403 .694	54 .636 .278 .646	55 .363 .354 .451	56 .658 .469 .633	57 .378 .645 .368	58 .767 .407 .768	59 .702 .432 .690	60 .449 .352 .440
44	Shoulder Lgth	.354	.300	.087	.048	.301	.210	.453	.068	.062	.233
45	Sitting Height	.823	.664	.236	.180	.509	.722	.609	*.100	.081	.613
46	Slv Lgth Spine-El	.764	.735	.360	.321	.755	.583	.437	.357	.295	.398
47	Slv Lgth Spine-Sc	.407	.363	.334	.338	.365	.438	.289	.366	.305	.337
48	Slv Lgth Spine-Wr	.829	.828	.368	.340	.859	.576	.456	.367	.302	.377
4 9	Sleeve Outseam	.822	.842	.248	.231	.880	.467	.391	.230	.170	.277
50	Span	.858	.869	.240	.231	.891	.492	.405	.244	.168	.324
51	Stature		.946	.281	.232	.796	.684	.572	.217	.180	.523
52	Tenth Rib Hght	.946		.275	.243	.808	.601	.464	.231	.176	.398
53	Thigh Circ	.281	.275		.812	.304	.626	.352	.696	.713	.349
54	Thigh Clearance	.232	.243	.812		.283	.521	.252	.629	.627	.280
55	Thumbtip Reach	.796	.808	.304	.283		.508	.433	.327	.266	.339
56	Vert Trnk Circ USA	.684	.601	.626	.521	.508		.657	.573	.561	.699
57	Waist Back Lgth, O	.572	.464	.352	.252	.433	.657		.371	.512	.698
58	Waist Circ, NI	.217	.231	.696	.629	.327	.573	.371		.888	.432
59	Waist Circ, O	.180	.176	.713	.627	.266	.561	.512	.888		.509
60	Waist Front Lgth, O	.523	.398	.349	.280	.339	.699	.698	.432	.509	
61	Waist Hght, NI	.915	.942	.337	.304	.798	.611	.499	.308	.268	.423
62	Waist Hght Sit, NI	.433	.407	.354	.338	.278	.527	.406	.267	.269	.393
63	Waist Hght Sit, O	.501	.439	.461	.453	.312	.589	.224	.225	.162	.250
64	Waist Hip Lgth	.365	.322	100	118	.180	.181	146	303	473	*105
65	Waist NI Waist O Lg	.062	.070	.299	.298	.083	.273	.441	.403	.538	.423
66	Weight	.530	.514	.878	.769	.521	.802	.508	.830	.793	.534
67	Wrist Cen Grip Lgth	.335	.340	.229	.184	.347	.321	.248	.247	.234	.256
68	Wrist Circ	.475	.443	.475	.436	.464	.607	.378	.493	.408	.377
69	Wrist Wall Lgth	.773	.784	.288	.271	.985	.492	.427	.314	.258	.328
70	Wrist Wall Lgth, Ex	.765	.772	.273	.216	.889	.494	.464	.309	.260	.321
- 00	rrelation not significant a	t <i>p</i> ≤ .05									

Female	 Corre 	lation	Coef	ficients
i Ciliale		iauvii		

1 2 3 4 5 6 7 8 9	Ab Ext Depth, S Acromial Ht, Sitting Ankle Circ Biceps C Flex Bideltoid Bdth S Bustpt-Bustpt Bdth Buttock Circ Buttock Height Buttock-Knee Lgth Buttock-Pop Lgth	61 .218 .611 .308 .208 .417 .237 .415 .905 .836 .821	62 .240 .562 .259 .277 .335 .148 .388 .302 .325 .260	63 .160 .580 .376 .319 .417 .142 .509 .340 .421 .367	64 359 .387 .051 191 055 108 006 .061 .144 .165	65 .442 .103 .120 .310 .259 .197 .294 .096 .157	66 .759 .448 .642 .796 .806 .478 .899 .541 .721	67 .199 .246 .249 .243 .282 .118 .263 .358 .315 .272	68 .391 .419 .618 .553 .562 .337 .513 .431 .485 .393	69 .223 .445 .274 .180 .385 .237 .365 .803 .748	70 .202 .448 .300 .181 .375 .211 .350 .806 .710
11 12 13 14 15 16 17 18 19 20	Calf Circumference Calf Height Chest Circ Chest Circ at Scye Chest Depth Crotch Height Crotch Length, O Crotch Lgth Pos, O Elbow Circ Elbow Rest Height	.297 .792 .314 .371 .223 .904 .464 .354 .418	.265 .262 .242 .303 .234 .269 .437 .322 .360 .425	.348 .251 .285 .388 .238 .317 .733 .573 .401 .407	008 *.088 217 144 242 .242 .456 .538 077 .225	.186 .110 .310 .290 .343 .021 056 154 .288	.748 .471 .824 .836 .752 .431 .647 .375 .848 .168	.231 .317 .235 .259 .157 .303 .246 .134 .313	.520 .378 .533 .564 .456 .373 .478 .325 .768 .140	.259 .708 .331 .373 .229 .803 .363 .276 .393 -146	.270 .689 .331 .369 231 .787 .371 .254 .390 120
21 22 23 24 25 26 27 28 29 30	Eye Height, Sitting Forearm Circ, Flex Forearm-Forearm B Forearm-Hand Lgth Functional Leg Lgth Gluteal Furrow Hght Head Circ Hip Breadth, Sitting Interscye II Knee Circ	.630 .320 .335 .814 .897 .904 .410 .389 .420	.548 .295 .302 .273 .320 .285 .215 .358 .310 .362	.593 .356 .350 .311 .387 .305 .278 .434 .310 .426	.477 *103 122 .180 .163 .177 .054 016 .037 017	.054 .237 .288 .064 .125 .065 *.091 .275 .177 .262	.396 .775 .777 .509 .657 .464 .476 .813 .574	.241 .283 .278 .395 .346 .328 .171 .235 .209 .252	.417 .722 .517 .524 .476 .398 .423 .421 .436 .599	.475 .303 .315 .830 .809 .797 .406 .327 .455 .413	.479 .312 .315 .799 .798 .790 .391 .315 .435
31 32 33 34 35 36 37 38 39 40	Knee Height, Mid Knee Height, Sitting Lateral Malleolus H Lower Thigh Circ Neck Bustpt Lgth Neck Circ Neck Circ, Base Ovrhd Fngrtp Rch E Ovrhd Fngrtp Rch S Popliteal Height	.891 .904 .425 .351 .233 .336 .379 .910 .827 .842 at p ≤ .05	.279 .299 .212 .331 .182 .294 .274 .365 .439 .205	.312 .352 .211 .399 .207 .337 .332 .426 .487 .243	.216 .205 .80 057 064 101 046 .346 .364	.061 .079 .054 .265 .192 .230 .185 .036 .067	.483 .568 .244 .832 .594 .716 .676 .499 .523	.320 .333 .208 .241 .198 .236 .220 .325 .310 .280	.419 .484 .283 .556 .374 .591 .567 .467 .502 .341	.796 .818 .342 .320 .216 .345 .400 .823 .755 .766	.769 .796 .323 .320 .200 .362 .441 .807 .752 .754

¹⁸⁶

Female Correlation Coefficients

		61	62	63	64	65	66	67	68	69	70
41	Scye Circ	.371	.338	.391	146	.308	.811	.267	.620	.360	.371
42	Scye Depth	.365	.272	.228	.019	.203	.506	.214	.365	.354	.400
43	Shoulder Circ	.452	.343	.394	*099	.292	.845	.279	.596	.439	.435
44	Shoulder Lgth	.297	.146	.130	.196	.010	.194	.170	.206	.290	.255
45	Sitting Height	.644	.555	.597	.458	.064	.425	.255	.430	.493	.505
46	Slv Lgth Spine-El	.734	.346	.395	.239	*.101	.591	.252	.534	.745	.729
47	Slv Lgth Spine-Sc	.401	.317	.326	.131	.165	.503	.125	.421	.353	.310
48	Slv Lgth Spine-Wr	.821	.333	.379	.214	*.096	.607	.311	.561	.845	.830
49	Sleeve Outseam	.818	.267	.320	.235	.027	.458	.275	.455	.867	.850
50	Span	.841	.270	.325	.247	.018	.480	.348	.487	.865	.848
E4	Ctatura	045	400	504	005	222					
51	Stature	.915	.433	.501	.365	.062	.530	.335	.475	.773	.765
52	Tenth Rib Hght	.942	.407	.439	.322	.070	.514	.340	.443	.784	.772
53	Thigh Circ	.337	.354	.461	*100	.299	.878	.229	.475	.288	.273
54	Thigh Clearance	.304	.338	.453	118	.298	.769	.184	.436	.271	.216
55	Thumbtip Reach	.798	.278	.312	.180	*.083	.521	.347	.464	.985	.890
56	Vert Trnk Circ USA	.611	.527	.589	.181	.273	.802	.321	.607	.492	.494
57	Waist Back Lgth, O	.499	.406	.224	146	.441	.508	.248	.378	.427	.464
58	Waist Circ, NI	.308	.267	.225	303	.403	.830	.247	.493	.314	.309
59	Waist Circ, O	.268	.269	.162	473	.538	.793	.234	.408	.258	.260
60	Waist Front Lgth, O	.423	.393	.250	105	.423	.534	.256	.377	.328	.321
61	Waist Hght, NI		.603	.441	.254	.313	.564	.349	.444	.774	.755
62	Waist Hght Sit, NI	.603		.503	.173	.675	.430	.223	.312	.263	.259
63	Waist Hght Sit, O	.441	.503		.442	039	.503	.186	.401	.297	.288
64	Waist Hip Lgth	.254	.173	.442		444	047	.002	.080	.166	.137
65	Waist NI Waist O Lg	.313	.675	039	444		.340	.108	.128	.080	.060
66	Weight	.565	.430	.503	047	.340		.330	.664	.500	.487
67	Wrist Cen Grip Lgth	.349	.223	.186	.002	.108	.330		.326	.301	.283
68	Wrist Circ	.444	.312	.401	.080	.128	.664	.326		.459	.501
69	Wrist Wall Lgth	.774	.263	.297	.166	.080	.500	.301	.435		.904
70	Wrist Wall Lgth, Ex	.755	.259	.288	.137	.060	.487	.283	.459	.904	
* Co	rrelation not significant a	t <i>p</i> ≤ .05									

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CHAPTER IV BIVARIATE TABLES

	Total	8.0	12.0	41.0	108.0	136.0	167.0	167.0	148.0	104.0	64.0	27.0	14.0	4.0	0.0	1.0	1000.0			
	927						5.4		2.7	2.7	2.7	1.4	1.4				16.0 1			
	606			4.	<u>4</u> .	4.1	4.1	4.1	<u>4</u> .	8.1	4.1	1.4	1.4	4			33.0			
	891			4.	5.4	6.8	2.7	5.4	9.5	5.4	4.1	2.7	4.	4.			46.0		SE(est) 0.032 0.039)
	873	<u>4</u> .		4.	5.4	4.1	17.6	14.9	13.6	16.3	10.8	2.7	4.				89.0		S	•
	855		4.	4.1	5.4	17.6	19.0	17.6	21.7	12.2	6.8	2.7	2.7				108.0		Slope 0.235 0.288)
	837		4.	2.7	21.7	17.6	19.0	29.8	24.4	17.6	6.8	5.4		1.4			148.0			•
ģ	819			6 .8	17.6	17.6	31.2	31.2	27.1	14.9	17.6	5.4					169.0		Intercept 4.560 7.271	
toiot Hoist	801	2.7	4.1	10.8	16.3	21.7	21.7	32.5	24.4	13.6	2.7	4.1	4.1				159.0		-	
	783	2.7	2.7	5.4	13.6	19.0	13.6	9.5	13.6	5.4	5.4						91.0		r 0.260 0.260)
	765		1.4	5.4	12.2	16.3	21.7	12.2	8.9	4.	2.7	4.	4.				83.0			
Males	747	4.			4.	5.4	4.1	5.4	1.4	5.4						4.1	28.0		SD 62.12 44.64	5
erence:	729		1.4	4.1	2.7	2.7	* 4.1	1.4	1.4	4.							19.0			
Circum	711				4.	2.7	1.4	4.									7.0		Mean 994.97 831.31	· ?
Buttock	693						4.	4.									3.0	n Results		•
eight vs.	675				4.												1.0	Regressio	t Variable rcumferen	<u>.</u>
Crotch Height vs. Buttock Circumference: Males	Buttock	621 821	849	877	905	933	961	686	1017	1045	1073	1101	1129	1157	1185	1213	Totai	Bivariate Regression Results	Dependent Variable Buttock Circumference	2

22.0

36.0

89.0

139.0

170.0

151.0

129.0

107.0

64.0

1.7

21.0

7.0

1000.0

5.0

Intercept 5.316 6.595

SD 62.46 45.51

Mean 974.46 760.83

Dependent Variable Buttock Circumference Crotch Height

Total

606

1.7 3.4 10.0 846 1.7 1.7 5.2 5.2 17.0 1.7 825 8.6 10.3 8.6 6.9 52.0 5.2 3.4 8.6 804 6.9 18.9 18.9 12.0 10.3 10.3 5.2 95.0 1.7 5.2 1.7 6.9 783 22.3 3.4 20.6 15.5 18.9 17.2 10.3 129.0 6.9 3.4 762 10.3 18.9 8.6 32.6 27.5 15.5 168.0 24.1 10.3 6.9 3.4 17.2 27.5 8.6 36.1 20.6 18.9 189.0 8.6 5.2 1.7 Crotch Height 17.2 24.1 20.6 32.6 27.5 20.6 6.9 168.0 5.2 5.2 669 10.3 18.9 20.6 5.2 15.5 88.0 3.4 3.4 3.4 Crotch Height vs. Buttock Circumference: Females 678 10.3 12.0 1.7 3.4 8.6 1.7 45.0 657 1.7 3.4 3.4 3.4 8.6 27.0 3.4 636 5.0 **Bivariate Regression Results** 615 0.0 594 2.0 Buttock Circ 783 809 835 913 965 1043 861 887 991 1017 1069 1095 1121 1147 Total

5.0

18.0 45.0 Total 93.0 118.0 146.0 161.0 137.0 107.0 72.0 46.0 24.0 16.0 7.0 1000.0 16.0 927 5.4 2.7 2.7 4. 2.7 606 2.7 33.0 2.7 2.7 5.4 4.1 4 2.7 4. 2.7 4. 10.8 8.9 9.5 46.0 891 4.1 SE(est) 0.033 0.035 4. 2.7 4. 6.8 12.2 14.9 10.8 2.7 89.0 8.1 12.2 9.5 2.7 4.1 855 4. 20.3 19.0 14.9 24.4 2.7 2.7 108.0 4. 5.4 4 Slope 0.368 0.394 837 13.6 148.0 20.3 21.7 24.4 20.3 10.8 14.9 8.9 8.1 169.0 17.6 17.6 29.8 14.9 27.1 27.1 25.7 Intercept 4.1 6.255 4.394 Crotch Height 10.8 23.0 6.8 12.2 19.0 29.8 23.0 159.0 16.3 4. 5.4 5.4 783 4. 14.9 16.3 91.0 4. <u>~</u> 6.8 17.6 12.2 2.7 4.1 0.381 Crotch Height vs. Vertical Trunk Circumference (USA): Males 765 17.6 4. 19.0 10.8 10.8 **6**.8 83.0 4 4. 747 4. 6.8 28.0 4. 14 89 5.4 4. 4. 4. SD 44.64 79.12 729 4. 4. 2.7 19.0 5.4 4. 4. 4. 4. 711 4. 4 831.31 1657.88 4 4. 7.0 4 Mean Bivariate Regression Results 693 4. 4 3.0 Vertical Trunk Circ (USA) Dependent Variable 675 0. Crotch Height 1518 1425 1456 1549 1673 Vertical 1580 1611 1642 1487 1735 1704 1766 1797 1828 1859 Trunk Totals

Crotch Height vs. Vertical Trunk Circumference (USA): Females

)				•		O	Crotch Height	ight							
Vertical	594	615	636	657	678	669	720	741	762	783	804	825	846	888	606	Total
1365				1.7		1.7										3.0
1392			1.7	3.4	3.4	1.7	5.2	1.7								17.0
1419				1.7		6.9	8.6	6.9	1.7	3.4	1.7					31.0
1446				5.2	5.2	12.0	12.0	8.6	1.7	6.9						52.0
1473			1.7	5.2	6.9	18.9	20.6	29.2	10.3	8.6	6.9	5.2				113.0
1500	1.7		1.7	3.4	5.2	12.0	30.9	41.2	25.8	10.3	9.8		1.7			143.0
1527				3.4	8.6	20.6	25.8	41.2	32.6	13.7	8.6	3.4	1.7	5.2		165.0
1554				1.7	6.9	8.6	25.8	25.8	29.2	36.1	22.3	10.3	1.7			168.0
1581					6.9	5.2	17.2	13.7	22.3	18.9	18.9	10.3	3.4	1.7		119.0
1608					1.7		15.5	13.7	17.2	10.3	6.9	12.0	1.7	1.7	1.7	82.0
1635				1.7			5.2	5.2	15.5	17.2	8.6	5.2	3.4			62.0
1662							1.7		9.6 4.	1.7	1.7	5.2	3.4			17.0
1689								1.7	5.2		5.2				1.7	14.0
1716									3.4		3.4			1.7		0.6
1743										1.7	1.7				1.7	5.0
Totals	2.0	0.0	5.0	27.0	45.0	88.0	168.0	189.0	168.0	129.0	95.0	52.0	17.0	10.0	5.0 1	1000.0
Bivariate Regression Results	egression	Results														

SE(est) 0.032 0.043

Slope 0.379 0.510

5.604 3.106

0.44

SD 45.51 66.18

Dependent Variable Mean Crotch Height 760.83 Vertical Trunk Circ (USA) 1551.13

137.0 30.0 Total 9.0 20.0 58.0 77.0 110.0 145.0 141.0 95.0 79.0 70.0 19.0 3.0 1000.0 16.0 5.4 4. 2.7 4. 927 5.4 33.0 2.7 2.7 4. 4.1 6. 2.7 2.7 4.1 4. 4. 6.8 46.0 6.8 5.4 4. 5.4 SE(est) 0.033 0.040 2.7 2.7 4. 891 2.7 89.0 13.6 14.9 16.3 5.4 2.7 6.8 6.8 10.8 2.7 8. 108.0 17.6 17.6 10.8 24.4 14.9 2.7 6.8 2.7 2.7 4. Slope 148.0 16.3 16.3 16.3 23.0 10.8 8.9 27.1 12.2 10.8 837 4 4.1 169.0 17.6 28.5 23.0 10.8 20.3 13.6 6.8 9.5 21.7 Intercept 5.4 Crotch Height 159.0 10.8 10.8 23.0 10.8 801 9.5 24.4 25.7 10.8 13.6 2.7 2.7 2.7 Crotch Height vs. Waist Circumference (Natural Indentation): Males 91.0 783 10.8 13.6 2.7 8.1 12.2 5.4 8.1 13.6 6.8 2.7 2.7 4 765 24.4 83.0 4. 8 12.2 9.5 5.4 2.7 2.7 2.7 28.0 747 4. 6.8 5.4 2.7 4. 4 2.7 S 729 19.0 4. 2.7 4 2.7 4. 4. 4.1 4 711 4. <u>4</u>. 7.0 4. 4 4. Mean Bivariate Regression Results 3.0 693 4. 4. Dependent Variable 675 1.0 Circ (NI) 682 738 99/ 794 822 850 878 906 1018 1046 934 990 1074 Waist Totals

8.482 6.081

0.110

44.64 75.69

831.31 868.19

Waist Circumference (NI)

Crotch Height

Crotch Height vs. Waist Circumference (Natural Indentation): Females

Total	7.0	34.0	65.0	155.0	192.0	172.0	134.0	82.0	74.0	33.0	31.0	12.0	2.0	5.0	2.0	1000.0			
606								3.4				1.7				5.0 10			
888			1.7		1.7	1.7	1.7		3.4							10.0			
846				3.4	3.4	3.4			3.4	1.7	1.7					17.0		SE(act)	0.037
825				10.3	13.7	3.4	5.2	5.2	5.2	3.4	3.4				1.7	52.0		7	0 0
804		5.2	6.9	13.7	13.7	20.6	10.3	5.2	5.2	6.9	5.2			1.7		95.0		Slope	0.181
783		3.4	10.3	20.6	13.7	32.6	20.6	8.6	13.7	1.7		1.7		1.7		129.0		σ.	0 0
762	1.7	3.4	6.9	13.7	36.1	24.1	25.8	10.3	17.2	13.7	6.9	5.2	1.7	1.7		168.0		Intercent	7.531
Crotch Height 720 741		10.3	17.2	37.8	34.4	27.5	27.5	20.6	3.4	3.4	6.9	1.7				189.0		Ţ	7
Crotch 720		6.9	12.0	27.5	37.8	27.5	18.9	20.6	12.0	1.7	3.4					168.0		L	0.162 0.162
669	1.7	3.4	5.2	18.9	20.6	15.5	10.3	5.2	6.9							88.0			0 0
678			5.2	5.2	10.3	5.2	89.	3.4	1.7		3.4	1.7				45.0		SD	45.51 67.98
657	1.7	1.7	1.7	1.7	6.9	8.6	3.4		1.7							27.0			9
636	1.7			1.7			1.7									5.0		Mean	760.83 733.77
615																0.0	Results	-	l
594						1.7										2.0	egression	Variable	nference
Waist Circ (NI)	573	602	631	099	689	718	747	9//	805	834	863	892	921	950	626	Totals	Bivariate Regression Results	Dependent Variable	Crotch Height Waist Circumference (NI)

122.0 79.0 11.0 1.0 145.0 100.0 57.0 22.0 3.0 1000.0 8.0 22.0 60.0 92.0 117.0 163.0 Total 16.0 2.7 4. 4. 4. 2.7 2.7 927 33.0 606 2.7 6.8 2.7 2.7 5.4 4 2.7 4.1 4. 46.0 SE(est) 0.035 0.038 2.7 6.8 2.7 6.8 4. 6.8 5.4 5.4 4. 4 891 89.0 17.6 12.2 873 6 5.4 2.7 2.7 5.4 5.4 8.1 8. 108.0 855 20.3 20.3 12.2 16.3 21.7 4. 1.4 2.7 2.7 5.4 4. Slope 0.133 0.142 148.0 10.8 28.5 19.0 17.6 16.3 20.3 837 12.2 4. 4. <u>~</u>. 8.1 4. 169.0 Intercept 8.287 5.611 819 27.1 17.6 13.6 19.0 13.6 10.8 16.3 16.3 24.4 4 5.4 2.7 Crotch Height 159.0 16.3 13.6 28.5 16.3 28.5 9.5 12.2 6.8 801 10.8 2.7 4. 5.4 2.7 91.0 783 16.3 10.8 10.8 9.5 12.2 5.4 5.4 4. 5.4 <u>8</u> 4.1 Crotch Height vs. Waist Circumference (Omphalion): Males 83.0 23.0 14.9 765 6.8 9.5 6.8 6.8 2.7 4. 4. <u>8</u> 28.0 747 4. 2.7 8.1 4 5.4 44.64 86.76 SD 19.0 729 2.7 2.7 2.7 4.1 4 7.0 711 4. 4. 2.7 831.31 896.72 Mean Bivariate Regression Results 3.0 1.4 693 4. Crotch Height Waist Circumference (O) Dependent Variable 0. 675 4. Waist Circ (O) 679 815 849 1019 1053 1155 713 917 985 1087 883 951 1121 747 781 Totals

89.0

21.0

Total

Crotch Height vs. Waist Circumference (Omphalion): Females

144.0 136.0 125.0 132.0 1000.0 606 5.0 1.7 1.7 1.7 888 1.7 1.7 10.0 3.4 3.4 846 17.0 3.4 1.7 825 6.9 12.0 10.3 1.7 52.0 3.4 3.4 6.9 3.4 1.7 12.0 804 5.2 8.6 24.1 6.9 10.3 3.4 5.2 95.0 5.2 3.4 1.7 1.7 783 10.3 17.2 17.2 25.8 15.5 1.7 8.6 8.6 6.9 129.0 5.2 3.4 6.9 1.7 6.9 15.5 29.2 22.3 24.1 12.0 12.0 10.3 6.9 168.0 13.7 Intercept 1.7 Crotch Height 741 37.8 27.5 18.9 22.3 189.0 3.4 13.7 24.1 8.6 8.6 15.5 3.4 3.4 720 168.0 8.6 25.8 18.9 25.8 3.4 13.7 22.3 22.3 12.0 6.9 6.9 1.7 669 1.7 6.9 15.5 12.0 8.6 15.5 88.0 13.7 1.7 3.4 1.7 1.7 678 1.7 5.2 1.7 5.2 5.2 6.9 45.0 5.2 3.4 SD 1.7 3.4 5.2 27.0 657 3.4 5.2 1.7 636 1.7 1.7 5.0 Mean 760.83 808.33 Bivariate Regression Results 615 0.0 Dependent Variable 594 2.0 Waist Circ (O) 632 663 725 756 818 849 694 880 787 973 1035 911 942 1004 1066 Totals

82.0

55.0

64.0

38.0

26.0

12.0

5.0

0.030

0.086

7.878

0.118

45.51 88.65

Crotch Height Waist Circumference (O)

Eye Height, Sitting vs. Buttock Knee Length: Males	ıt, Sitting	ıvs. But	ttock Kne	ee Leng	th: Male	S		Eve Height Sitting	Siffing Driffing							
Buttock	673	688	703	718	733	748	763	-y~ 1.0g	793	808	823	838	853	868	883	Total
909 206				4.												1.0
519																0.0
532					4.1		2.7									4.0
545			2.7	4.1	2.7	4.1	4	4.1	4.	1.4						22.0
558	1.4			4.	2.7	6.8	6.8	9.5	6.		4.1					41.0
571				2.7	8.	10.9	13.6	20.3	9.5	9.5	4.1					77.0
584		4.		2.7	8.2	9.6	21.7	32.5	32.6	20.3	10.8	2.7	1 .			144.0
265				1.4		16.3	12.2	31.3	31.3	31.3	19.0	9.5	2.7			155.0
610				4.	4.1	14.9	20.3	25.7	25.8	36.7	16.3	6.8	5.4	2.7	1.4	162.0
623					2.7	8.1	10.9	24.5	29.9	28.5	20.3	14.9	12.2	4.		154.0
636					2.7	4.1	5.4	10.9	19.0	25.8	20.3	10.9	4.1	2.7	4.	107.0
649					4.1	5.4	2.7	4.	5.4	12.2	10.9	12.2	8.2	4.	1.4	65.0
995								1.4	6.8	2.7	12.2	9.5		2.7	4.	39.0
675							4.	5.4	4.1	2.7	4.1	4.	4.1			23.0
688												4.	4.1	4.	4.	5.0
Totals	1.0	1.0	3.0	15.0	33.0	77.0	102.0	170.0	174.0	171.0	122.0	0.69	39.0	12.0	10.0	1000.0
Bivariate Regression Results	egression	Results														
Dependent Variable	Variable	-	Mean		SD		.	<u>-</u>	Intercept		Slope	S	SE(est)			
Buttock Knee Length Eve Height Sitting	ee Length Sitting		614.62 800.85		30.23 33.53		0.458		4.561 5.146		0.478 0.439		0.034			
, of J	n	1														

Eye Height, Sitting vs. Buttock Knee Length: Females

840 855 Total	1.7	3.4	11.9	30.9		68.7	68.7	68.7 137.3 1.7 158.1			<u> </u>	<u> </u>	7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	<u> </u>	1 1 1 1	<u> </u>	7.1
825										7.1	3.4	7. 4. 8. 4. 8. 4. 8. 4. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.	7. 4. 8. 7. 4. 4.	7. 4. 8. 7. 4. 4.	7. 4. 8. 8. 4. E. C.	7. 4. 8. 8. 4. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.	7.1 4. 8. 8.5
810									9 6	თ _. დ	6. 6. 6. 5.	6.9 5.2 5.2	6. 9 5. 2 5. 2	6. 5. 5. 6. 5. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	6 7 7 6 7 7	6. 5. 5. 6. 2. 2.	6.9 5.2 5.2 17.3
795						1.7		3.4	3.4 8.6	3.4 8.6 12.0	8.8 5.0 6.9 6.9	3.8 8.6 6.9 6.9 10.3	3.4 8.6 6.9 7.7 7.6 13.7	3.4 8.6 12.0 6.9 10.3 13.7	3.4 8.6 12.0 6.9 10.3 13.7 1.7	3.4 8.6 12.0 6.9 10.3 13.7 1.7	3.4 8.6 12.0 6.9 10.3 1.7 1.7
780					1.7	10.3		6.9	6.9	6.9 20.6 24.1	6.9 20.6 24.1 12.0	6.9 20.6 24.1 12.0 13.7	6.9 20.6 24.1 12.0 13.7	6.9 20.6 24.1 12.0 13.7 13.7	6.9 20.6 24.1 12.0 13.7 13.7 1.7	6.9 20.6 24.1 12.0 13.7 13.7 1.7	6.9 20.6 24.1 12.0 13.7 13.7 1.7 1.7
Eye Height, Sitting 750 765			1.7	1.7	1.7	8.6		24.1	24.1	24.1 46.4 29.2	24.1 46.4 29.2 20.6	24.1 46.4 29.2 20.6 24.1	24.1 46.4 29.2 20.6 24.1 1.7	24.1 46.4 29.2 20.6 24.1 1.7	24.1 46.4 29.2 20.6 24.1 1.7	24.1 46.4 29.2 20.6 24.1 1.7	24.1 46.4 29.2 20.6 24.1 1.7
Eye Heigt 750				1.7	5.2	18.9	24.1	: I	22.3	22.3	22.3 34.4 18.9	22.3 34.4 18.9	22.3 34.4 18.9 13.7	22.3 34.4 18.9 13.7 5.2	22.3 34.4 18.9 13.7 5.2	22.3 34.4 18.9 13.7 5.2	22.3 34.4 18.9 13.7 5.2 5.2
735			1.7	8.6	12.0	30.9	46.4		29.2	29.2	29.2 15.5	29.2 15.5 12.0 6.9	29.2 15.5 12.0 6.9	29.2 15.5 12.0 6.9 3.4	29.2 15.5 12.0 3.4 3.4	29.2 15.5 12.0 3.4 3.4	29.2 15.5 12.0 6.9 3.4
720	1.7			6.9	8.6	49.8	27.5		37.8	37.8	37.8 27.5 6.9	37.8 27.5 6.9 5.2	37.8 27.5 6.9 5.2 1.7	37.8 27.5 6.9 5.2 1.7	37.8 27.5 6.9 5.2 1.7	37.8 27.5 6.9 5.2 1.7	37.8 27.5 6.9 5.2 1.7 1.7
705			3.4	3.4	25.8	13.7	13.7		13.7	13.7	13.7	13.7 10.3 8.6	13.7 10.3 8.6	13.7 10.3 8.6	13.7 10.3 8.6	13.7 10.3 8.6	10.3 8.6 82.6
069		1.7	3.4	6.9	10.3		6.9		6.9	6.9	6.9	6.9 1.7 1.7 3.4	6.9	6.9	6.9 1.7 1.7 3.4	6.9 1.7 1.7 3.4	6.9 1.7 1.7 3.4 3.4 4.6
675		1.7			1.7	3.4	1.7			1.7	3.4	3.4	3.4	3.4	7. 4. 8.	7. 4. 8.	~
099			1.7		1.7		1.7										5.1 n Results
645				1.7													591 605 619 633 647 661 675 Totals 1.7 5.1 Grand total not 1000 due to rounding
Buttock	Knee 479	493	207	521	535	549	563	i	291	591 605	591 605 619	591 605 619 633	591 605 619 633 647	591 605 619 633 647 661	591 605 633 647 661 675	591 605 633 647 661 661 675	591 605 633 647 661 675 675 Grand total is

	Total	1.0	1.0	4.0	12.0	74.0	123.0	161.0	183.0	164.0	134.0	86.0	36.0	12.0	4.0	3.0	1000.0			
	883									4.1	2.7		2.7	2.7			10.0			
	868								2.7	1.4		5.5	2.7				12.0			
	853						4.	4.	4.1	6.8	5.5	8.2	9.6	4.1			38.0		SE(est)	0.035
	838						4.	4.1	12.3	16.4	17.8	15.0	2.7				70.0			
	823					2.7	12.3	12.3	15.0	24.6	24.6	21.9	5.5	2.7	4.		123.0		Slope	0.501 0.434
	808					5.5	19.2	23.3	41.0	36.9	24.6	13.7	2.7	2.7	4.1		171.0			
Sitting	793					15.0	13.7	38.3	34.2	30.1	19.2	12.3	5.5	4.	4.	2.7	174.0		Intercept	4.931 4.293
Eve Height Sitting	778				2.7	13.7	27.4	39.7	38.3	21.9	16.4	6.8	4.	4.			170.0		-	
ц	763			<u>4.</u>	5.5	13.7	20.5	17.8	17.8	10.9	12.3	1.4					101.0		_	0.466
	748			<u>4</u> .		9.6	16.4	15.0	13.7	9.5	9.5	1.4	4.1				78.0			
fales	733		4.			6.8	5.5	5.5	6.8	4.1	4.		4.				33.0		SD	33.53 37.45
Reach: Males	718	4.1		4 .	2.7	4.1	4.1	4.									15.0			
	703				4.	4.											3.0		Mean	800.85 800.34
g vs. Thu	688					4.											1.0	n Results		
ht, Sittinį	673						4.										1.0	Regressio	t Variable	t, Sitting Reach
Eye Height, Sitting vs. Thumbtip	Thumbtip	Reach 662	089	869	716	734	752	770	788	806	824	842	860	878	988	914	Totals	Bivariate Regression Results	Dependent Variable	Eye Height, Sitting Thumbtip Reach

Eye Height, Sitting vs. Thumbtip Reach: Females

Total 3.0 26.0 0.99 119.0 7.0 5.0 184.0 162.0 157.0 114.0 83.0 38.0 24.0 2.0 10.0 1000.0 855 2.0 1.7 840 1.7 3.0 825 1.7 1.7 9.0 SE(est) 0.040 0.038 810 3.4 5.2 3.4 17.0 1.7 795 10.3 1.7 3.4 15.5 12.1 6.9 60.0 5.2 1.7 Slope 0.521 0.494 780 13.8 1.7 3.4 12.1 25.9 19.0 15.5 95.0 Eye Height, Sitting 13.8 20.7 37.9 32.8 13.8 24.1 5.2 160.0 3.4 Intercept 3.459 750 15.5 34.5 25.9 15.5 10.3 31 12.1 153.0 735 5.2 1.7 17.2 27.6 39.7 27.6 10.3 20.7 167.0 12.1 1.7 0.507 0.507 720 8.6 17.2 25.9 46.6 29.3 20.7 13.8 176.0 8.6 3.4 705 15.5 1.7 3.4 20.7 17.2 10.3 17.2 91.0 5.2 32.31 36.82 SD 690 3.4 3.4 13.8 5.2 3.4 3.4 45.0 1.7 675 1.7 1.7 1.7 1.7 1.7 14.0 Mean 750.62 727.42 Bivariate Regression Results 99 1.7 1.7 5.0 Dependent Variable Eye Height, Sitting Thumbtip Reach 645 1.7 2.0 Thumbtip 605 653 699 685 637 717 749 621 701 765 813 829 845 781 797 Totals

Functional Leg Length vs. Thumbtip Reach: Males	Leg Len	gth vs.	Thumbti	p React	n: Males	<i>(</i> A		1	-	‡						
Thumbtip	881	906	931	956	981	1006	1031	-unctiona 1056	runctional Leg Length 1056 1081 1	1106	1131	1156	1181	1206	1231	Total
Keach 662	1.4															1.4
680		4.														4.
869				4.1												4 .1
716				5.5	2.7	4.										12.3
734			4.	2.7	17.7	23.2	16.4	10.9		4.4						73.7
752				2.7	23.3	24.6	49.1	12.3	10.9							122.9
770					4.1	28.6	49.1	40.9	25.9	8.2	4.1					160.9
788					4.	8.2	43.7	54.6	42.3	23.2	8.2	4.				183.0
806						<u>4.</u>	10.9	39.6	47.7	36.8	20.5	6.8				163.7
824							4.	15.0	39.6	39.6	24.6	12.3	2.7			135.2
842							4.	4.1	9.5	28.6	24.6	13.6	6.8	4.		87.3
860								4.		8.8	12.3	8.2	4.1	2.7		35.5
878										4.	4.	5.5	2.7		1.4	12.4
968												2.7	4.			4.1
914												4.		4.		2.8
Totals 1.4 1.4 Cand total not 1000 due to rounding Bivariate Regression Results	1.4 1000 due to gression f	1.4 rounding Results	4.	15.0	49.2	90.1	172.0	176.1	175.9	146	95.7	51.9	17.7	5.5	4.	1000.7
Dependent Variable Functional Leg Length Thumbtip Reach	Variable eg Length		Mean 1004.76 800.34		SD 52.01 36.82		r 0.788 0.788	=	Intercept 2.075 1.477		Slope 0.782 0.793	<u>8</u>	SE(est) 0.023 0.023			

Functional Leg Length vs. Thumbtip Reach: Females	al Leg Ler	ngth vs.	Thumb(ip Reacl	h: Fem	sles	-	Enotional Lead and the	7 00	£						
Thumbtip	819	842	865	888	911	934	957	086	1003	1026	1049	1072	1095	1118	1141	Total
Keach 605	1.7		1.7													3.0
621		1.7	1.7	1.7	1.7											7.0
637			5.2													5.0
653			3.4	1.7	8.6	3.4	6.9	1.7								26.0
699			1.7	5.2	12.0	25.8	15.5	3.4	1.7							99.0
685				3.4	12.0	37.8	37.8	20.6	6.9							119.0
701					10.3	20.6	50.0	50.0	34.5	15.5	3.4					184.0
717						12.0	24.1	39.5	51.7	22.4	10.3		1.7			162.0
749						1.7	13.7	20.6	48.3	34.5	27.5	8.6	1.7			157.0
765							1.7	8.6	31.0	37.9	24.1	6.9	3.4			114.0
781								1.7	17.2	24.1	13.7	17.2	6.9		1.7	83.0
797									5.2	3.4	6.9	10.3	6.9	5.2		38.0
813										1.7	6.9	3.4	8.6	9. 4		24.0
829															1.7	2.0
845												3.4	1.7		5.2	10.0
Totals	2.0	2.0	14.0	12.0	45.0	102.0	150.0	147.0	197.0	140.0	93.0	20.0	31.0	9.0	9.0	1000.0
Bivariate Regression Results	egression	Results														
Dependent Variable Functional Leg Length	Variable Leg Lengt		Mean 1004.76		SD 52.01 36.82		r 0.828 0.828	-	Intercept 1.256 1.495		Slope 0.933 0.735	w S	SE(est) 0.029 0.023			
i dinguinu i	Leach Leach	-	74.12	•	20.02		0.020		0		3		200			

3.0 15.0 33.0 101.0 Total 1.0 1.0 78.0 170.0 174.0 171.0 123.0 70.0 38.0 12.0 10.0 1000.0 1598 3.0 2.7 1567 16.0 2.7 2.7 4. 2.7 4.1 1536 12.3 2.7 2.7 9.6 2.7 37.0 4. SE(est) 0.030 0.022 1505 10.9 23.3 15.0 10.9 5.5 75.0 8.2 4. Overhead Fingertip Reach, Sitting 1381 1412 1443 1474 26.0 32.8 24.6 19.2 127.0 2.7 2.7 5.5 12.3 4 Slope 0.826 0.624 47.9 8.2 13.7 17.8 207.0 30.1 S 28.7 2.7 57 20.5 5.5 9.6 54.7 39.7 205.0 39.7 27.4 4 Intercept 4.1 1.330 3.700 89 23.3 20.5 160.0 47.9 35.6 23.3 4. 1350 2.7 9.6 24.6 32.8 23.3 9.6 109.0 Overhead Fingertip Reach, Sitting vs. Eye Height, Sitting: Males 4. 2.7 0.718 1319 4. 6.8 6.8 9.6 6.8 40.0 4.1 1288 5.5 4. 16.0 2.7 2.7 4. SD 33.53 59.28 1257 4. 1.0 1226 1.0 800.85 1437.97 Mean Bivariate Regression Results 1195 0.0 Dependent Variable
Eye Height, Sitting
Overhd Fingertip Rch, S 1164 0. 1.4 Eye Height 673 718 703 733 748 763 778 793 808 823 838 853 868 883 Totals

i t	l otal	2.0	5.0	14.0	45.0	91.0	176.0	167.0	153.0	160.0	95.0	0.09	17.0	9.0	3.0	2.0	1000.0		
146.6	1405									1.7		3.4			1.7		7.0		
7	1441									1.7		8.6	1.7				12.0		
7	7141								5.2	3.4	5.2	8.6	1.7	6.9		1.7	33.0		SE(est) 0.025 0.031
1303	1393							3.4	6.9	12.1	17.2	15.5	8.6				64.0		S
2000	1309				1.7		1.7	5.2	15.5	20.7	20.7	13.8	1.7	1.7	1.7		84.0		Slope 0.664 0.811
Sitting	1345						6.9	20.7	39.7	56.9	27.6	6.9	3.4				162.0		
Females Overhead Fingertip Reach, Sitting	1321				6.9	5.2	29.3	24.1	44.8	32.8	12.1	1.7					157.0		Intercept 1.876 2.453
s Fingertip	/671			1.7	1.7	13.8	41.4	44.8	25.9	24.1	6.9	1.7					162.0		<u>-</u>
Female Overhead	12/3			3.4	6.9	29.3	41.4	41.4	8.6	5.2	3.4						140.0		0.734 0.734
Sitting:	1249				6.9	15.5	34.5	12.1	1.7	1.7	1.7						74.0		
Height,	1225		1.7	3.4	12.1	20.7	13.8	10.3	5.2								67.0		SD 32.31 56.83
1 vs. Eye	1201		3.4	1.7	3.4	3.4	6.9	3.4									22.0		
h, Sitting	11//	1.7		3.4	1.7	3.4											10.0		Mean 750.62 1323.21
ip Reac	1153				1.7			1.7									3.0	ո Results	-
d Finger	1129				1.7												2.0	egression	Variable Sitting gertip Rc
Overhead Fingertip Reach, Sitting vs. Eye Height, Sitting: Females Overhead F	Eye Heiaht	645	099	675	069	705	720	735	750	765	780	795	810	825	840	855	Totals	Bivariate Regression Results	Dependent Variable Eye Height, Sitting Overhd Fingertip Rch, S

1.0

15.0

49.0

90.0

172.0

176.0

176.0

146.0

4

95.0

4.

52.0

4.

4.1

18.0

5.0

<u>4</u>.

4.

1000.0

3.0

16.0

37.0

75.0

127.0

206.0

207.0

160.0

109.0

40.0

16.0

0.

1.0

0.0

0.

Totals

Bivariate Regression Results

1.0

Total

1598

1567

1536 9.5 16.4 2.7 5.5 <u>4</u>. 1505 23.2 15.0 8.2 19.1 4. overhead Fingertip Reach Sitting 15.0 36.8 40.9 21.8 4.1 5.4 2.7 27.3 38.2 61.4 10.9 16.4 50.1 36.8 5.5 15.0 47.7 61.0 24.6 12.3 9.5 28.6 21.8 53.2 34.1 Overhead Fingertip Reach, Sitting vs. Functional Leg Length: Males 1350 2.7 19.1 27.3 28.6 21.8 8.2 1319 8.2 15.0 10.9 1288 8.9 4. 1257 4 1226 4. 1195 1164 Leg Length 881 906 926 1006 1056 1081 1106 1131 1156 1206 931 981 1031 1181 1231

ist)	25 30	77
SE(est)	0.025	0.0
Slope	0.811	0.715
Intercept	0.928	3.261
.	0.761	0.761
SD	51.49	59.28
Mean	1080.60	1437.97
Dependent Variable	Functional Leg Length	Overhd Fingertip Rch, S

Overhea	d Fingert	ip Reacl	h, Sitting	y vs. Fur	Overhead Fingertip Reach, Sitting vs. Functional Leg Length: Females	eg Lenç	yth: Fen	gth: Females Overhead Einsertin Booch Citting	4000							
Leg	1129	1153	1177	1201	1225	1249	1273	1297 1297	1321	1345	1369	1393	1417	1441	1465	Total
819		1.7														2.0
842	1.7															2.0
865		1.7	6.9		3.4	1.7										14.0
888			1.7	5.2	5.2											12.0
911			1.7	5.2	12.1	8.6	10.3	3.4	3.4							45.0
934				8.6	19.0	15.5	37.9	15.5	3.4	1.7						102.0
957				1.7	17.2	27.6	36.2	39.7	19.0	8.6						150.0
980					8.6	15.5	20.7	36.2	31.0	25.9	8.6					147.0
1003				1.7	1.7	3.4	27.6	37.9	44.8	46.6	22.4	10.3				197.0
1026						1.7	3.4	27.6	32.8	25.9	22.4	20.7	3.4	1.7		140.0
1049							3.4	1.7	15.5	32.8	15.5	15.5	6.9		1.7	93.0
1072									5.2	15.5	3.4	8.6	13.8	3.4		50.0
1095									1.7	5.2	5.2	6.9	6.9	3.4	1.7	31.0
1118											5.2	1.7	1.7			9.0
1141											1.7			3.4	3.4	9.0
Totals	2.0	3.0	10.0	22.0	0.79	74.0	140.0	162.0	157.0	162.0	84.0	64.0	33.0	12.0	7.0	1000.0
Bivariate Regression Results	egression	Results														
Dependent Variable Functional Leg Length	Variable eq Lenot		Mean 1004.76		SD 52.01		r 0 771	TI C	Intercept 2 244	3)	Slope 0.737	SE	SE(est)			
Overhd Fingertip Rch, Sit	gertip Rcf	Sit	1323.21	/	56.83		0.771		1.685	,	0.806	0 0	0.028			

Shoulder Circumference vs. Stature: Males	Circumfe	erence	vs. Statu	ıre: Mal	Se		<i>U</i>	thoulder (Shoulder Circumference	٥						
Stature	1001	1033	1059	1085	1111	1137	1163	1189	1215	1241	1267	1293	1319	1345	1371	Total
1497		4.														1.0
1528																0.0
1559				4.1	4.1		4.									7.0
1590	4.	2.7	1.4	4.	2.7	2.7	4.									14.0
1621		2.7	4.1	4.1	2.7	10.8	4.1	4.1	4.							34.0
1652		2.7	5.4	8.1	12.2	12.2	13.6	6.8	2.7	2.7						0.99
1683	5.4	4.	6.8	19.0	16.3	16.3	17.6	19.0	10.8	2.7	2.7	2.7	4.1			122.0
1714		4.	4.1	14.9	20.3	23.0	37.9	21.7	20.3	9.5	9.5		4.			164.0
1745	4.	2.7	4.1	12.2	13.6	28.5	46.0	33.9	20.3	10.8	8.8	4.1	2.7	4.		188.0
1776	4.	4.	4.1	9.5	21.7	17.6	23.0	33.9	25.7	14.9	6.8	4.	4.1	4.1		161.0
1807		4.	4.	4.	2.7	12.2	24.4	12.2	14.9	21.7	10.8	4.	4.		<u>4</u> .	107.0
1838				4.1	4.1	4.1	10.8	10.8	9.5	12.2	6.8	2.7		4.		0.99
1869		4.		2.7		4.1	6.8	8.1	9.1	8.1	2.7	4.	5.4	4.4		50.0
1900							4.	2.7	1.4	2.7	4.	4.1				14.0
1931									4.1		1.4					5.0
Totals	9.0	19.0	28.0	81.0	98.0	131.0	188.0	153.0	119.0	85.0	49.0	18.0	14.0	5.0	0.1	1000.0
Bivariate Regression Results	egressior	n Resul	ts													
Dependent Variable Shoulder Circumference	Variable ircumfere		Mean 1181.53		SD 62.54		r 0.407	-	Intercept 3.219		Slope 0.444	S	SE(est) 0.037			
Stature			1760.71		99.89	_	0.407		6.316	-	0.373	-	0.031			

17.0

58.0

112.0

179.0

163.0

162.0

108.0

88.0

57.0

26.0

3.0

2.0

SE(est) 0.036 0.040

Slope 0.375 0.415

Intercept 4.355

53.25 68.60 SD

1024.95 1632.84 Mean

Total

Shoulder Circumference vs. Stature: Females

9.0

1000.0 1170 9.0 1.7 3.4 1.7 1148 1.7 1.7 1.7 1.7 7.0 1126 10.3 3.4 6.9 24.0 1104 10.3 12.0 5.2 41.0 5.2 1082 6.9 17.2 5.2 3.4 53.0 3.4 1.7 1.7 20.6 3.4 17.2 22.3 15.5 8.6 6.9 101.0 Shoulder Circumference 1038 27.5 163.0 3.4 6.9 15.5 24.1 36.1 20.6 10.3 13.7 3.4 1016 8.6 17.2 24.1 27.5 144.0 17.2 12.0 22.3 5.2 5.2 994 12.0 39.5 30.9 168.0 13.7 20.6 18.9 20.6 6.9 3.4 1.7 972 15.5 3.4 5.2 29.2 22.3 153.0 18.9 36.1 6.9 6.9 3.4 950 20.6 1.7 6.9 10.3 13.7 64.0 3.4 928 1.7 8.6 10.3 6.9 6.9 3.4 41.0 906 3.4 6.9 3.4 1.7 21.0 Bivariate Regression Results 884 1.7 1.7 1.7 7.0 Dependent Variable Shoulder Circumference Stature 862 3.4 3.0 Stature 1428 1458 1518 1488 1548 1578 1608 1638 1668 1698 1728 1758 1788 1818 1848 Totals

Sitting Height vs. Functional Leg Length: Males	Function	nal Leg L	ength:	Males		U	بطونول ومنازن	‡							
810	825	840	855	870	885	006	915	930	945	096	975	066	1005	1020	Total
		4.1													1.0
				4.											1.0
							4.								1.0
926	4.1	4.1	1.4	4.	2.7	4.									15.0
981	2.7	4.	8.2	4.1	9.5	12.2	6.8	4.1	2.7						49.0
1006 2.7	4.	4.1	8.2	8.2	19.0	23.0	16.3	6.8	1 .						91.0
1031		4.	8.2	16.3	27.1	37.9	32.5	27.1	14.9	5.4	4.1				173.0
1056	4.		4.1	17.7	17.7	24.4	33.9	43.5	16.3	13.6	2.7	2.7			175.0
1081		4.	4 .1	12.2	17.7	29.8	27.1	35.2	24.4	17.7	4.1	2.7			177.0
1106		1.4	4.	5.4	8.9	19.0	35.2	21.7	23.0	23.0	6.8				144.0
1131			2.7	2.7		9.5	13.6	10.9	21.7	16.3	9.5	6.8	1.4		95.0
1156				4.1	2.7	2.7	4.1	5.4	12.2	8.2	9.5	1.4	1.4	4.1	53.0
1181							1.4	2.7	2.7	6.8	2.7	1.4			18.0
1206						4.		1.4				4.	1.4		5.0
1231										4.1					1.0
3.0	7.0	15.0	35.0	71.0	103.0	164.0	173.0	156.0	120.0	92.0	37.0	16.0	4 .0	4.0	1000.0
Bivariate Regression Results	n Result	v													
Dependent Variable Functional Leg Length		Mean 1080.60		SD 51.49		r 0.516		Intercept 4.765		Slope 0.462		SE(est) 0.028			
Sitting Height		923.35		34.61		0.516		3.188		0.577		0.035			

Sitting Height vs. Functional Leg Length: Females

)	•					•										
Leg	754	769	784	799	814	829	844	Sitting Height 859	ight 874	889	919	934	949	964	979	Total
819						1.7										2.0
842			1.7													2.0
865	1.7		1.7	1.7	3.4	3.4	1.7									14.0
888			3.4		3.4		3.4	1.7								12.0
911			1.7	6.9	8.6	12.0	8.6	5.2		1.7						45.0
934		3.4		10.3	15.5	29.2	17.2	17.2	1.7	3.4	3.4					101.0
957			1.7		24.1	37.8	39.5	24.1	12.0	6.9	1.7	1.7				149.0
980				5.2	8.6	20.6	34.4	22.3	27.5	18.9	8.6					146.0
1003			1.7	6.9	10.3	30.9	36.1	29.2	48.1	13.7	13.7	3.4	1.7	1.7		198.0
1026			1.7	5.2	5.2	10.3	12.0	17.2	25.8	34.4	12.0	12.0	1.7	1.7		139.0
1049				1.7	1.7	1.7	8.6	15.5	20.6	18.9	12.0	10.3		1.7		93.0
1072					1.7	5.2	3.4	1.7	6.9	6.9	13.7	8.6	1.7	1.7		52.0
1095				1.7			3.4		8.6	5.2	3.4	5.2	3.4			31.0
1118								1.7	3.4	1.7	1.7					9.0
1141									1.7	1.7	3.4	1.7			1.7	9.0
Totals	2.0	3.0	14.0	40.0	82.0	153.0	168.0	136.0	155.0	113.0	74.0	43.0	0.6	7.0	2.0	1000.0
Bivariate Regression Results	egressior	า Results														

SE(est) 0.038 0.032

Slope 0.590 0.489

1ntercept 4.028 3.550

0.537

SD 52.01 33.49

Mean 1004.76 864.55

Dependent Variable Functional Leg Length Sitting Height

	677 Total	4.0	9.0	49.0	1.4 81.0	123.0	161.0	1,4 145.0	1.4 183.0	4.1 96.0	0.69	57.0	9.0	8.0	1.0	3.0	8.0 1000.0		
	663					4.	2.7	2.7	2.7		4.1						14.0		
	649			,	4.		4.1	4.	4.	1.8	8.1	4.1	4.		4.		28.0		SE(est) 0.038 0.033
	635	4.		1.4	6.8	5.4	12.2	6.8	10.8	8.1	5.4	13.6	4.	1.4		2.7	77.0		0)
	621			4.4	6.8	12.2	23.0	14.9	39.3	16.3	17.6	8.1	2.7				142.0		Slope 0.321 0.278
	209			4 .1	16.3	9.5	19.0	19.0	25.7	21.7	6.8	6.8	4.1				130.0		
meast	593		4.	10.8	10.8	23.0	32.5	24.4	39.3	14.9	8.1	9.5		4.1			176.0		Intercept 4.121 7.077
Sleeve Outseam	579		1.4	6.8	14.9	25.7	32.5	32.5	29.8	14.9	9.5	6.8		5.4			180.0		
-	565	4.	4.	9.5	12.2	23.0	14.9	25.7	16.3	5.4	6.8	5.4					122.0		0.299 0.299
vo.	551	1.4	2.7	8.1	8.1	14.9	14.9	12.2	8.	2.7	2.7	2.7	2.7				81.0		
e: Males	537		2.7	2.7	2.7	8.9	6.8	4.1	5.4								31.0		SD 72.26 30.06
mferenc	523			2.7			1.4		4.								5.0		
est Circu	909					4.1			1.4								3.0	Its	Mean 1011.79 600.22
n vs. Ch	495																0.0	sion Resu	ple
Sleeve Outseam vs. Chest Circumference:	481	_		4.1			-		_	_	_		•				1.0	Bivariate Regression Results	Dependent Variable Chest Circumference Sleeve Outseam
Sleeve	Chest	Circ 811	842	873	904	935	996	266	1028	1059	1090	1121	1152	1183	1214	1245	Totals	Bivariate	Depend Chest C

1.7
<u>ග</u> ග
8.6 3.4 13.7 6.9
8.6
5 15.5 0 27.5
8.6 15.5 22.3 12.0
1.7 22
5.2

ž E	Sleeve Outseam vs. Neck Circumference:	Circumfe	erence:	Males		v	acosti O ovoolo	a coat							
495		609	523	537	551	565	579 579	593	607	621	635	649	663	677	Total
				4.											1.0
					4.	1.4	4.								4.0
			2.7	2.7		2.7	2.7		2.7		4.1	4.1		4.	20.0
				4.1	12.2	10.8	5.4	19.0	4	5.4	5.4				0.99
		1.4	1 .	4.1	16.3	20.3	25.7	16.3	12.2	10.8	6.8		1.4		115.0
				13.6	16.3	23.0	40.7	40.7	20.3	25.7	8.1	4.		4.	194.0
		4.	4.1	2.7	17.6	24.4	39.3	36.6	31.2	31.2	16.3	5.4	5.4	2.7	215.0
				2.7	8.1	19.0	32.5	33.9	25.7	32.5	12.2	2.7	2.7		172.0
				4 .	2.7	12.2	13.6	14.9	17.6	17.6	12.2	2.7	4.	1.4	98.0
				1.4	2.7	4.1	12.2	8.1	10.8	12.2	4.	6.8	4.	1.4	62.0
					2.7	4.1	4	5.4	2.7	4.1	8.9	4.1			34.0
					4.			4.	4.	2.7	2.7	4.	4		12.0
							4.								1.0
							4.1								1.0
									4.1		1.4				3.0
0.0		3.0	5.0	31.0	81.0	122.0	180.0	176.0	130.0	142.0	77.0	28.0	14.0	8.0	1000.0
Bivariate Regression Results															
	≥၂ဣ ဣ	Mean 381.99 600.22	3	SD 19.90 30.06		0.240	-	Intercept 5.060 7.189		Slope 0.221 0.261	9	SE(est) 0.033 0.039			

Sleeve Outseam vs. Neck Circumference: Females

Neck	421	436	451	466	481	496	517	Sleeve Outseam 526 541	utseam 541	556	571	586	504	4	631	L G
oj.	į	}		}		2	5	3	5	3	5	3	3	2	50	lola
277					1.7	1.7		1.7			1.7					7.0
283					1.7	1.7	6.9	6.9	3.4			1.7				22.0
289					3.4	6.9	6.9	5.2	5.2	3.4						31.0
295				6.9	5.2	10.3	32.6	18.9	18.9	15.5	6.9	5.2	1.7			122.0
301	1.7			5.2	6.9	20.6	18.9	29.2	22.3	22.3	5.2	1.7	1.7			136.0
307					8.6	13.7	27.5	41.2	27.5	22.3	10.3	5.2	5.2		1.7	163.0
313				6.9	3.4	15.5	15.5	36.1	32.6	24.1	17.2	1.7		1.7		155.0
319				1.7	3.4	6.9	12.0	24.1	20.6	20.6	13.7	5.2	3.4			112.0
325						6.9	15.5	24.1	12.0	22.3	6.9	5.2	1.7	1.7		96.0
331				1.7	1.7		5.2	15.5	12.0	13.7	8.6	3.4	1.7			64.0
337							8.6	3.4	3.4	6.9	6.9	1.7			1.7	33.0
343						1.7	5.2	6.9	5.2	1.7	6.9					27.0
349							1.7	1.7	1.7	6.9	3.4	1.7	1.7		3.4	22.0
355									1.7	1.7	1.7		1.7			7.0
361									1.7			1.7				3.0
Totals	2.0	0.0	0.0	22.0	36.0	86.0	156.0	215.0	168.0	162.0	89.0	34.0	19.0	3.0	7.0	1000.0
riate Re	Bivariate Regression Results	Results														

Slope 0.361 0.220

3.817 7.007

SD 15.49 30.12

Mean 314.85 540.72

Dependent Variable
Neck Circumference
Sleeve Outseam

	9 1900 1931 Total	4.2	9.5		4	4 &	4 8 21	4 8 1. 6 1.	4 8 12 15 4.1 16 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1	4 8 1.4 1.4 1.4 1.4 1.8 1.4 1.4 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	4 4 16 12 14 14 18 6.8 1.4 19 9	4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.	4 4 14 16 6 8 1.4 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4 4 14 16 6.8 1.4 6 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.	4 4 14 14 14 18 6 8 1.4 4 19 9 9 5.7 1.4 6 9 5 5	4 4 1. 4 1. 4 1. 4 1. 4 1. 4 1. 4 1. 4	4 4 14 16 6.8 1.4 19 6 6.8 1.4 9 6 6 100 13.6 5.6 100
	8 1869			4 1.4	8 1.4	7 2.7		9.5				-	-	-	7	4-	4-	- ω
	1838			1.4	6.8	2.7		5.4		~	- +	- +		- +	- -			 6
	1807			4.	4.	12.2	17.6											-
	1776	1.4	4.	8.1	8.1	13.6	31.2		20.3	20.3	20.3 36.6 17.6	20.3 36.6 17.6 13.6	20.3 36.6 17.6 13.6	20.3 36.6 17.6 13.6 5.4 1.4	20.3 36.6 17.6 13.6 5.4 4.1	20.3 36.6 17.6 13.6 5.4 4.1	20.3 36.6 17.6 13.6 4.1	-
	1745			4.1	17.6	21.7	27.1		40.7	40.7	40.7	40.7 40.7 14.9 5.4	40.7 40.7 14.9 5.4 10.8	40.7 40.7 14.9 5.4 10.8	40.7 40.7 4.9 4.6 4.1 4.1 4.1	40.7 40.7 5.4 10.8 1.4 1.4	40.7 40.7 5.4 10.8 4.1 4.1	40.7 40.7 5.4 10.8 10.8 1.4 1.4 1.8 10.8
Stature	1714		2.7	8.8	14.9	25.7	29.8		25.7	25.7	25.7 19.0 20.3	25.7 19.0 20.3 13.6	25.7 19.0 20.3 13.6 4.1	25.7 19.0 20.3 13.6 4.1	25.7 19.0 20.3 13.6 4.1 4.1	25.7 19.0 20.3 13.6 4.1 4.1	25.7 19.0 20.3 13.6 4.1 1.4	25.7 19.0 20.3 13.6 4.1 4.1
	1683	4.	2.7	8.	19.0	20.3	19.0		13.6	13.6	13.6 16.3 6.8	13.6 16.3 6.8 1.4	13.6 6.8 6.8 7.9 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	13.6 6.8 6.8 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	13.6 6.8 6.8 7.7 7.7 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7	13.6 6.8 6.8 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	13.6 6.8 6.8 7.4 7.4 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6	13.6 6.8 6.8 6.8 1.4 1.4 1.2 1.2 1.2 1.2
	1652			9.5	6.8	12.2	8.1		12.2	12.2	12.2	12.2 14.9 1.4 4.1	2. 2. 4. 1. 4. 1. 4. 1. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	221 64 1 7 4.1 7 4.1	221 64-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	221 44 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	221	2. 2. 4. 4. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.
	1621		2.7	4.1	2.7	8.0	8.1		5.4	5.4 4.1	5.4 1.4 1.4	4. 4. 4. 4.	4. t. 4. t. 4.	7. 4 L L T T T T T T T T T T T T T T T T T	7. 4. 1. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	7. 4. + + + + + + + + + + + + + + + + + +	7. 4. 1. 1. 4. 1. 4. 4.	4. t. 4. t. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.
Males	1590	4.1		4.1		2.7	2.7			2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
ference:	1559			4.		2.7	4.		4.	4.	1.	1 .	4.	4.	4.	4.	4.	
Circum	1528																	0.0 e to roundin
s. Chest	1497			4.														1.4 ot 1000 due Regressio
Stature vs. Chest Circumference:	Chest	다. 841	842	873	904	935	996		266	997	1028 1059	997 1028 1059	997 1028 1090 1121	997 1028 1059 1121 1152	997 1028 1059 1090 1151 1162	997 1028 1059 1090 1151 1183	997 1028 1059 1121 1183 1245	997 1028 1059 1090 1121 1152 1183 1214 1245 Totals 1.4 0.0 Grand total not 1000 due to rounding Bivariate Regression Results

Stature vs. Chest Circumference: Females

Chest	1428	1458	1488	1518	1548	1578	1608	Stature 1638	1668	1698	1728	1758	1788	1818	1848	Total
715		1.7														2.0
745		3.4			1.7	1.7		1.7		1.7						10.0
775	1.7	1.7		1.7	1.7	8.6	3.4	3.4	1.7	1.7	1.7					27.0
805			3.4	8.6	17.2	10.3	12.0	6.9	5.2	3.4	1.7	1.7	1.7			72.0
835	1.7	1.7	1.7	8.6	24.1	22.3	15.5	13.7	13.7	6.9	3.4	1.7				115.0
865	3.4	1.7	5.2	12.0	22.3	32.6	36.1	17.2	22.3	18.9	12.0	3.4				187.0
895			3.4	10.3	17.2	32.6	42.9	27.5	15.5	18.9	5.2	5.2	1.7			180.0
925	1.7		3.4	5.2	13.7	30.9	25.8	36.1	20.6	12.0	10.3	1.7			1.7	163.0
955				6.9	8.6	18.9	8.6	22.3	6.9	12.0	6.9	8.6		1.7		101.0
985				1.7	5.2	12.0	10.3	12.0	12.0	5.2	5.2	1.7	1.7			67.0
1015				3.4		5.2	1.7	12.0	6.9	5.2	3.4	1.7				40.0
1045						3.4	5.2	6.9	1.7		1.7		1.7	1.7		22.0
1075							1.7			1.7	3.4					7.0
1105									1.7							2.0
1135								1.7			1.7					3.0
Totals	9.0	10.0	17.0	58.0	112.0	179.0	163.0	162.0	108.0	88.0	57.0	26.0	7.0	3.0	2.0 1	1000.0
Bivariate Regression Results	gression	Results	4-													
Dependent Variable	Variable		Mean		SD		ı	드	Intercept	U)	Slope	SE	SE(est)			
Chest Circur Stature	mference	,	912.68 1632.84	.	66.18 68.60		0.263 0.263		5.257 5.385	00	0.253 0.273	0 0	0.039			

4.0 9.0 49.0 81.0 123.0 145.0 183.0 96.0 69.0 1000.0 Total 161.0 57.0 9.0 8.0 1.0 3.0 563 9.0 4. 4 4 2.7 551 4. 14.0 2.7 2.7 5.4 539 16.0 4 <u>4</u>. 5.4 4 SE(est) 0.034 0.032 4.1 527 12.2 10.8 6.8 41.0 2.7 4. 4. 2.7 515 9.5 12.2 10.8 9.5 72.0 5.4 9.5 4. 5.4 2.7 <u>4</u>. Slope 0.457 0.433 Waist Back Length (Omphalion) 13.6 13.6 29.8 17.6 16.3 131.0 5.4 <u>8</u> 16.3 8. 2.7 Intercept **6**.8 19.0 42.0 24.4 33.9 9.5 175.0 2.7 9.5 4. 23 <u>4</u>. <u>4</u> 3.214 5.278 13.6 23.0 29.8 32.5 36.6 180.0 4. <u>~</u> 20.3 4. <u>%</u> 4. Waist Back Length (Omphalion) vs. Chest Circumference: Males 467 4. 2.7 14.9 28.5 23.0 27.1 24.4 10.8 2.7 141.0 4.1 4 0.445 126.0 455 2.7 9.5 19.0 19.0 17.6 24.4 19.0 **6**.8 4. 4. 4 4. 443 10.8 13.6 64.0 2.7 9.5 9.5 5.4 6.8 2.7 4. 72.26 27.00 SD 22.0 431 6.8 2.7 2.7 2.7 2.7 4 419 1011.79 488.35 5.0 2.7 4. Mean Bivariate Regression Results 0. 407 4. Chest Circumference Waist Back Length (O) Dependent Variable 395 3.0 4. 4 Circ 811 842 873 935 1028 1059 1090 1183 1245 904 996 997 1121 1152 1214 Chest Totals

Waist Back Length (Omphalion) vs. Chest Circumference: Females

Vaist Dack Echigai (Chiphranon)	<u> </u>		,	5				Maiet Dag	, 4tono 1 7	in damo,	(
Chest	374	386	398	410	422	434	446	458 470 482	470	482 482	494	909	518	530	542	Total
Circ 715				1.7												2.0
745	1.7				1.7	3.4	3.4									10.0
775	1.7		1.7	5.2	5.2	6.9	3.4	1.7	1.7							27.0
802		3.4	5.2	17.2	6.9	10.3	10.3	8 .	5.2	3.4	1.7					72.0
835		1.7	1.7	12.0	24.1	36.1	22.3	15.5	1.7							115.0
865			1.7	13.7	44.7	37.8	36.1	34.4	12.0	5.2	1.7					187.0
895		1.7	.9.	20.6	34.4	25.8	27.5	25.8	13.7	15.5	5.2	1.7				180.0
925	1.7	3.4	1.7	8.6	22.3	29.2	34.4	27.5	22.3	8.6	1.7				1.7	163.0
955				1.7	12.0	17.2	22.3	15.5	15.5	6.9	10.3					101.0
985				3.4	6.9	6.9	25.8	1.7	13.7		6.9	1.7				0.79
1015						6.9	13.7	5.2	6.9	3.4		1.7	1.7			40.0
1045						3.4	5.2	5.2	3.4	5.2						22.0
1075							1.7	1.7			3.4					7.0
1105												1.7				2.0
1135								1.7					1.7			3.0
Totals	5.0	10.0	21.0	84.0	158.0	184.0	206.0	144.0	0.96	48.0	31.0	7.0	3.0	0.0	2.0 1	1000.0
Bivariate Regression Results	egressior	n Results														

SE(est) 0.042 0.035

Slope 0.392 0.328

Intercept 4.460 4.420

SD 66.18 24.22

Mean 912.68 448.47

Dependent Variable Chest Circumference Waist Back Length (O)

Weight vs. Stature: Males	s. Stature	: Male:	s				>	Weight								
Stature	52.9	57.2	61.5	65.8	70.1	74.4	78.7	83.0	87.3	91.6	95.9	100.2	104.5	108.8	113.1	Total
1497	4.1															1.0
1528																0.0
1559		4.1		4.1		1.4										7.0
1590	4.1	4.1	4.	4.1		2.7										14.0
1621	2.7	4.4	5.4	5.4	10.8	5.4		4.	4.1							34.0
1652		4.	12.2	12.2	13.6	12.2	13.6	4.								0.99
1683	2.7	8.1	17.6	16.3	21.7	21.7	6.8	9.5	9.5	4.1	2.7		4.			122.0
1714		2.7	12.2	19.0	31.2	28.5	24.4	17.6	19.0	6.8		2.7				164.0
1745		4.1	6.8	13.6	24.4	37.9	35.2	32.5	14.9	12.2		4.1	4.1	4.		188.0
1776		1.4	4.1	14.9	16.3	21.7	19.0	27.1	27.1	14.9	9.5	5.4				161.0
1807				2.7	5.4	16.3	16.3	16.3	16.3	14.9	9.5	4.1	4.1	4.		107.0
1838			4.	4.1	2.7	4.1	6.8	8.1	12.2	6.8	10.8	8.1		2.7	1.4	0.99
1869					5.4	4.	4.	8.9	6.8	8.1	8.1	2.7	5.4		1.4	50.0
1900									4.1	4. 1.	1.4	1,4	1.4	4.1		14.0
1931									4.			4.1	2.7			5.0
Totals	11.0	19.0	61.0	93.0	131.0	153.0	126.0	121.0	112.0	72.0	42.0	30.0	19.0	7.0	3.0	1000.0
Bivariate Regression Results	Regression	n Results														
Dependent Variable Stature Weight	t Variable		Mean 1760.71 80.64		SD 68.66 11.53		r 0.562 0.562	=	Intercept 5.756 0.882		Slope 0.468 0.674	0) - 3	SE(est) 0.025 0.037			
ı																

Weight vs. Stature: Females	. Stature:	Fema	les				Moiob									
Stature	38.9	42.8	46.7	50.6	54.5	58.4	62.3	66.2	70.1	74.0	77.9	81.8	85.7	89.6	93.5	Total
1428		1.7	1.7	3.4	1.7											0.6
1458	5.2		1.7	1.7	1.7											10.0
1488		1.7	3.4		6.9	3.4	1.7									17.0
1518		3.4	8.6	8.6	15.5	13.7	5.2		3.4							58.0
1548		6.9	6.9	29.2	25.8	22.3	13.7	1.7	5.2							112.0
1578		3.4	5.2	18.9	44.7	36.1	30.9	25.8	10.3	1.7	1.7					179.0
1608			3.4	17.2	37.8	44.7	22.3	18.9	10.3	3.4	5.2					163.0
1638		1.7		12.0	13.7	29.2	34.4	25.8	15.5	15.5	10.3	3.4				162.0
1668				3.4	17.2	24.1	18.9	12.0	10.3	10.3	5.2	5.2	1.7			108.0
1698				1.7	6.9	12.0	29.2	15.5	13.7	5.2	1.7	1.7				88.0
1728				3.4		5.2	13.7	5.2	10.3	8.6	1.7	3.4		3.4	1.7	92.0
1758					3.4	3.4	3.4	3.4	5.2	5.2	1.7					26.0
1788						1.7	1.7					1.7	1.7			7.0
1818										1.7				1.7		3.0
1848													1.7			2.0
Totals	5.0	19.0	31.0	100.0	175.0	196.0	175.0	108.0	84.0	52.0	27.0	15.0	5.0	9.0	2.0 1	1000.0
Bivariate Regression Results	gression l	Results														
Dependent Variable	/ariable	2	Mean		SD		_	드	Intercept	0,	Slope	S	SE(est)			
Stature Weight		16	1632.84 62.57		68.60 8.79		0.527 0.527		3.757 2.847		0.540 0.513	00	0.036 0.034			

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CHAPTER V REGRESSION EQUATIONS

Regression Results for Crotch Height / Waist Circ. (Natural Indentation)

		β	β		Adjusted
Variable	Intercept	Crotch Ht.	Waist C.	r	r ²
Females	•				
1. Ankle	119.949	.045	.072	.461	.210
Circumference	se est 8.379	se est .010	se est .007		
2. Buttock	345.597	.212	.637	.737	.542
Circumference	se est 32.434	se est .039	se est .026		
3. Calf Circumference	180.073	.059	.176	.541	.290
	se est 15.287	se est .018	se est .012		
4. Crotch Length	309.853	.203	.207	.466	.214
(OM)	se est 26.606	se est .032	se est .021	·	
5. Crotch Length,	181.271	.132	.040	.271	.070
Posterior (OM)	se est 19.164	se est .023	se est .015		
6. Knee	114.629	.126	.212	.671	.450
Circumference	se est 14.004	se est .017	se est .011		
7. Knee Height	9.404	.549	.036	.941	.884
Midpatella	se est 7.084	se est .009	se est .006		
8. Thigh	172.226	.087	.466	.700	.489
Circumference	se est 25.582	se est .031	se est .021		
Males					
1. Ankle	95.048	.057	.092	.565	.317
Circumference	se est 8.656	se est .009	se est .005		
2. Buttock	216.480	.240	.667	.849	.720
Circumference	se est 25.331	se est .027	se est .016		
3. Calf Circumference	159.463	.045	.213	.637	.405
	se est 15.442	se est .017	.se est .010		
4. Crotch Length	226.553	.181	.314	.602	.360
(OM)	se est 26.534	se est .029	se est .017		
5. Crotch Length,	141.788	.137	.072	.354	.123
Posterior (OM)	se est 17.575	se est .019	se est .011		
6. Knee	113.695	.120	.203	.732	.534
Circumference	se est 12.132	.se est .013	se est .008		
7. Knee Height,	7.317	.539	.055	.920	.846
Midpatella	se est 8.209	se est .009	se est .005		
8. Thigh	88.531	.096	.497	.782	.611
Circumference	se est 23.568	se est .025	se est .015		

Regression Results for Crotch Height / Waist Circ. (Omphalion)

		β	β		Adjusted
Variable	Intercept	Crotch Ht.	Waist C.	r	r ²
Females					
1. Ankle	126.001	.045	.072	.450	.200
Circumference	se est 8.244	se est .010	se est .007		
2. Buttock	374.044	.212	.637	.768	.589
Circumference	se est 30.069	se est .039	se est .026		
3. Calf Circumference	197.669	.059	.176	.510	.257
	se est 15.286	se est .018	se est .012		
4. Crotch Length	351.830	.203	.207	.392	.151
(OM)	se est 27.057	se est .032	se est .021		
Crotch Length,	202.720	.132	.040	.251	.060
Posterior (OM)	se est 18.853	se est .023	se est .015		
6. Knee	129.543	.126	.212	.669	.446
Circumference	se est 13.721	se est .017	se est .011		
7. Knee Height,	13.005	.549	.036	.940	.884
Midpatella	se est 6.958	se est .009	se est .006		
8. Thigh	196.257	.087	.466	.722	.520
Circumference	se est 24.260	se est .031	se est .021		
Males					
1. Ankle	105.385	.053	.082	.574	.327
Circumference	se est 8.309	se est .009	se est .005		
2. Buttock	278.598	.199	.615	.889	.790
Circumference	se est 21.197	se est .024	se est .012		
3. Calf Circumference	184.841	.035	.188	.642	.411
	se est 14.850	se est .017	se est .009		
4. Crotch Length	261.974	.164	.280	.611	.372
(OM)	se est 25.421	se est .028	se est .015		
5. Crotch Length,	146.617	.132	.069	.367	.133
Posterior (OM)	se est 16.896	se est.019	se est .010		
6. Knee	132.138	.108	.187	.764	.583
Circumference	se est 11.096	se est .012	se est .006		
7. Knee Height,	12.385	.535	.051	.921	.848
Midpatella	se est 7.869	se est .008	se est .005		
8. Thigh	133.990	.065	.459	.823	.677
Circumference	se est 20.760	se est .023	se est .012		

Regression Results for Stature / Chest Circumference

		β	β		Adjusted
Variable	Intercept	Stature	Chest C.	r	r ²
Females					
1. Biceps	83.876	020	.253	.708	.499
Circumference, Flexed	se est 17.046	se est .010	se est .011	00	
2. Buttock	119.729	.192	.593	.715	.509
Circumference	se est 45.385	se est .027	se est .029	:	
3. Interscye II	43.338	.104	.179	.615	.376
	se est 20.516	se est .012	se est .013		
4. Neck	127.526	.054	.143	.668	.444
Circumference,Base	se est 12.779	se est .008	se est .008		
5. Shoulder Length	47.573	.057	.002	.354	.122
	se est 10.963	se est .007	se est .007		
6. Sleeve Outseam	-57.039	.356	.018	.823	.675
	se est 17.794	se est .011	se est .011		
7. Waist Back Length	80.425	.181	.079	.609	.368
(OM)	se est 19.965	se est 012	se est .013		
8. Waist	-86.094	047	1.065	.786	.616
Circumference (OM)	se est 56.975	se est .035	se est .036		
Males					
1. Biceps	57.587	001	.278	.751	.563
Circumference, Flexed	se est 17.155	se est .010	se est .010		
2. Buttock	40.507	.171	.646	.833	.692
Circumference	se est 33.419	se est .020	se est .019		
3. Interscye II	128.822	.040	.207	.592	.348
•	se est 21.273	se est .012	se est .012		
4. Neck	140.261	.050	.179	.682	.463
Circumference,Base	se est 15.066	se est .009	se est .008		
5. Shoulder Length	65.134	.047	.002	.298	.086
_	se est 10.317	se est .006	se est .006		
6. Sleeve Outseam	-24.010	.343	.019	.801	.641
	se est 17.472	se est .010	se est .010		
7. Waist Back Length	32.624	.195	.111	.656	.429
(OM)	se est 19.786	se est .012	se est .011		
8. Waist	-200.897	.046	1.004	.849	.720
Circumference (OM)	se est 44.526	se est .026	se est .025		

Regression Results for Waist Back Length (OM) / Chest Circumference

		β	В		Adjusted
Variable	Intercept	Waist Bk.	Chest C.	r	r ²
Females					
1. Buttock	212.380	.521	.579	.711	.504
Circumference	se est 36.646	se est .081	se est .030	, ,	
2. Interscye II	122.768	.193	.183	.578	.331
	se est 17.053	se est .037	se est .014		
3. Neck	157.351	.134	.140	.658	.432
Circumference, Base	se est 10.375	se est .022	se est .008		
4. Shoulder Length	89.124	.114	.004	.254	.061
	se est 9.103	se est .020	se est .007		
5. Sleeve Outseam	292.532	.425	.063	.412	.167
	se est 22.891	se est .050	se est .018		
6. Waist	-471.050	.971	.925	.823	.676
Circumference (OM)	se est 41.993	se est .092	se est .034		
7. Waist Front Length	69.208	.558	.084	.736	.541
(OM)	se est 12.534	se est .028	se est .010		
Males					
1. Buttock	124.549	.518	.610	.837	.701
Circumference	se est 24.064	se est .052	se est .020		
2. Interscye II	178.889	.026	.215	.584	.340
·	se est 15.629	se est .034	se est .013		
3. Neck	165.426	.151	.169	.685	.469
Circumference, Base	se est 10.939	se est .024	se est .009		
4. Shoulder Length	106.683	.086	.002	.215	.044
	se est 7.701	se est .017	se est .006		
5. Sleeve Outseam	333.173	.444	.050	.466	.215
	se est 18.856	se est .041	se est .015		
6. Waist	-374.562	.765	.887	.874	.764
Circumference (OM)	se est 29.856	se est .065	se est .024		
7. Waist Front Length	51.240	.641	.058	.775	.599
(OM)	se est 11.330	se est .025	se est .009		

Regression Results for Crotch Height / Buttock Circumference

		β	β		Adjusted
Variable	Intercept	Crotch Ht.	Buttock C.	r	r ²
Females					
1. Ankle	85.770	.023	.106	.572	.325
Circumference	se est 8.464	se est .009	se est .007		
2. Calf Circumference	101.740	.010	.251	.673	.450
	se est 14.699	se est .017	se est .012		
3. Crotch Length (OM)	152.513	.108	.391	.672	.449
<u> </u>	se est 24.354	se est .027	se est .020		
4. Crotch Length,	86.278	.077	.170	.467	.216
Posterior (OM)	se est 19.247	se est .021	se est .015		
5. Knee	19.610	.067	.303	.818	.667
Circumference	se est 11.883	se est .013	se est .010		
6. Knee Height,	5.768	.546	.033	.940	.883
Midpatella	se est 7.824	se est .009	se est .006		
7. Thigh	-61.882	057	.704	.929	.863
Circumference	se est 14.481	se est .016	se est .012		
8. Waist	902.072	.978	432	.842	.708
Circumference (OM)	se est 49.025	se est .027	se est .034		
Males					
1. Ankle	61.128	.022	.143	.680	.462
Circumference	se est 8.062	se est .009	se est .006		
2. Crotch Length,	91.511	.097	.146	.454	.204
Posterior (OM)	se est 17.552	se est .019	se est .013		
3. Calf Circumference	86.916	033	.324	.766	.586
	se est 13.507	se est .014	se est .010		
4. Crotch Length (OM)	134.330	.073	.457	.682	.465
	se est 25.457	se est .027	se est .019		
5. Knee	45.992	.047	.306	.856	.732
Circumference	se est 9.663	se est .010	se est .007		
6. Knee Height,	.820	.525	.066	.919	.844
Midpatella	se est 8.663	se est .009	se est .007		
7. Thigh	-76.651	085	.750	.935	.873
Circumference	se est 14.115	se est .015	se est .010		
8. Waist	865.870	.774	337	.906	.820
Circumference (OM)	se est 36.815	se est .014	se est .024		1

Regression Results for Sleeve Outseam / Chest Circumference

		β	β		Adjusted
Variable	Intercept	Sleeve O.	Chest C.	r	r²
Females					
1. Biceps	74.996	045	.253	.708	.499
Circumference, Flexed	se est 13.849	se est .023	se est .011		
2. Buttock	240.512	.332	.608	.703	.492
Circumference	se est 37.512	se est .063	se est .029		
3. Interscye II	94.087	.213	.183	.604	.363
-	se est 16.847	se est .029	se est .013		
4. Neck Circumference	141.238	.061	.154	.700	.488
	se est 9.342	se est .016	se est .007		
5. Shoulder Length	90.984	.083	.009	.329	.054
	se est 9.244	se est .016	se est .007		
6. Waist Back Length	217.959	.257	.100	.472	.220
(OM)	se est 18.020	se est .030	se est .014		
7. Waist	-103.469	111	1.065	.786	.616
Circumference (OM)	se est 46.272	se est .078	se est .036		
8. Wrist Circumference	65.773	.079	.047	.625	.388
	se est 4.597	se est .008	se est .003		
Males					
1. Biceps	67.868	025	.281	.751	.564
Circumference, Flexed	se est 14.103	se est .023	se est .009		
2. Buttock	156.514	.277	.664	.823	.677
Circumference	se est 28.184	se est .045	se est .019		
3. Interscye II	169.928	.036	.215	.585	.340
	se est 17.608	se est .028	se est .012		
4. Neck Circumference	172.402	.024	.193	.712	.506
	se est 11.159	se est .018	se est .007		
5. Shoulder Length	89.864	.093	.005	.263	.067
	se est 8.579	se est .014	se est .006		
6. Waist Back Length	167.765	.311	.132	.565	.318
(OM)	se est 17.799	se est .029	se est .012		
7. Waist	-158.136	.051	1.012	.849	.719
Circumference (OM)	se est 36.695	se est .059	se est .025		
8. Wrist Circumference	65.206	.089	.056	.643	.412
	se est 5.229	se est .008	se est .003		<u> </u>

Regression Results for Crotch Height / Vertical Trunk Circumference (USA)

i		β	β		Adjusted
Variable	Intercept	Crotch Ht.	VTC(USA)	r	r ²
Females	-	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
1. Biceps	30.952	095	.208	.537	.286
Circumference, Flexed	se est 19.937	se est .020	se est .014		
2. Buttock	-43.446	054	.683	.707	.498
Circumference	se est 44.975	se est .045	se est .031		
3. Calf Circumference	70.425	017	.191	.523	.272
	se est 20.474	se est .020	se est .014		
4. Chest	-28.596	152	.681	.642	.410
Circumference	se est 51.657	se est .052	es est .035		
5. Crotch Length (OM)	-24.366	010	.418	.702	.492
	se est 28.328	se est .028	se est .020		
6. Crotch Length,	15.929	.029	.176	.474	.222
Posterior (OM)	se est 23.204	se est .023	se est .016		
7. Interscye II	75.804	.094	.148	.491	.238
	se est 22.207	se est .022	se est .015		
8. Knee	-6.521	.041	.220	.632	.397
Circumference	se est 19.356	se est .019	se est .013		
9. Knee Height,	-3.234	.540	.030	.939	.881
Midpatella	se est 9.512	se est .009	se est .007		
Males					
1. Biceps	48.440	050	.199	.563	.315
Circumference, Flexed	se est 19.498	se est .020	se est .011		1
2. Buttock	-6.083	070	.639	.796	.633
Circumference	se est 33.164	se est .034	se est .019		
3. Calf Circumference	81.231	056	.210	.611	.372
	se est 18.144	se est .018	se est .010		
4. Chest	.163	185	.703	.734	.537
Circumference	se est 43.312	se est .044	se est .025		
5. Crotch Length (OM)	-1.680	042	.413	.745	.553
	se est 25.337	se est .026	se est .014		
6. Crotch Length,	45.934	.059	.134	.489	.237
Posterior (OM)	se est 18.729	se est .019	se est .011		
7. Interscye II	173.506	.016	.134	.401	.159
	se est 21.949	se est .022	se est .013		
8. Knee	27.296	.016	.210	.737	.542
Circumference	se est 13.770	se est .014	se est .008		
9. Knee Height,	-17.325	.510	.058	.921	.847
Midpatella	se est 9.350	se est .009	se est .005		

Regression Results for Crotch Height / Vertical Trunk Circumference (USA) (Continued)

		β	β		Adjusted
Variable	Intercept	Crotch Ht.	VTC(USA)	r	r ²
Females					
10. Neck	122,778	.025	404	504	0.10
Circumference, Base	se est 13.926	.025 se est .014	.131 se est .010	.561	.312
11. Shoulder Length	71.359	.059		000	
The Official Longin	se est 10.956	.039 se est .011	.018 se est .007	.299	.086
12. Sleeve Outseam	55.442	.543	.046	.871	.757
	se est 15.067	se est .015	se est .010	.07 1	.757
13. Thigh	-77.863	087	.467	.630	.395
Circumference	se est 36.850	se est .037	se est .025		.000
14. Waist Back Length	56.031	.069	.219	.667	.443
(OM)	se est 18.372	se est .018	se est .013		
15. Waist	-279.884	267	.832	.574	.327
Circumference (OM)	se est 73.902	se est .074	se est .051		
16. Waist Front Length	35.859	012	.238	.699	.487
(OM)	se est 16.159	se est .016	se est .011		
17. Wrist	46.057	.020	.058	.618	.379
Circumference	se est 5.584	se est .005	se est .003		
Males					
10. Neck	145.107	035	.177	.637	.405
Circumference, Base	se est 14.407	se est .015	se est .008		
11. Shoulder Length	91.892	.070	6.415	.281	.077
	se est 9.417	se est .010	se est .005		
12. Sleeve Outseam	65.861	.494	.074	.829	.686
12 Thigh	se est 14.829	se est .015	se est .008		
13. Thigh Circumference	-56.635 se est 30.727	122	.457	.703	.493
		se est .031	se est .017		
Waist Back Length (OM)	56.369 se est 16.373	.049 se est .017	.236	.726	.526
15. Waist			se est .009	700	
Circumference (OM)	-306.218 se est 49.040	340 se est .050	.896 se est .028	.768	.588
16. Waist Front Length	46.167	003		744	F00
(OM)	se est 15.600	003 se est .016	.229 se est .009	.714	.509
17. Wrist	45.577	.025		674	440
Circumference	se est 5.589	se est .006	.066 se est .003	.671	.448
2Jaimoronoo			30 031.003		

Regression Results for Stature / Shoulder Circumference

		β	β		Adjusted
Variable	Intercept	Should. C.	Stature	r	r ²
Females	•				
1. Biceps	25.266	.357	067	.759	.574
Circumference, Flexed	se est 16.349	se est .013	se est .010		
2. Buttock	4.521	.791	.097	.725	.524
Circumference	se est 46.527	se est .037	se est .029		
3. Chest	-56.215	1.063	074	.827	.683
Circumference	se est 40.219	se est .032	se est .025		. 1
4. Interscye II	-21.829	.299	.056	.712	.506
•	se est 18.996	se est .015	se est .012		
5. Neck	101.673	.187	.032	.667	.444
Circumference, Base	se est 13.297	se est .011	se est .008		
6. Shoulder Length	24.445	.048	.043	.410	.165
	se est 11.125	se est .009	se est .007		
7. Sleeve Outseam	-68.079	.039	.348	.824	.678
	se est 18.440	se est .015	se est .011	500	0.40
8. Waist Back Length	81.554	.073	.179	.590	.346
(OM)	se est 21.129	se est .017	se est .013		
9. Waist	-196.003	1.231	157	.698	.486
Circumference (OM)	se est 68.591	se est .054	se est .042		
10. Wrist	40.007	.063	.028	.648	.417
Circumference	se est 5.747	se est .005	se est .003		
Males					
1. Biceps	-11.077	.351	038	.787	.618
Circumference, Flexed	se est 16.569	se est .011	se est .010		
2. Buttock	-59.206	.700	.129	.775	.600
Circumference	se est 39.387	se est .025	se est .023		
3. Chest	-116.083	1.010	037	.860	.739
Circumference	se est 36.995	se est .024	se est .022		
4. Interscye II	56.877	.302	003	.693	.478
	se est 19.664	se est .013	se est .011		
5. Neck	96.782	.225	.027	.705	.495
Circumference, Base	se est 15.098	se est .010	se est .009		
6. Shoulder Length	42.129	.046	.031	.380	.142
	se est 10.327		se est .006	000	040
7. Sleeve Outseam	-30.355		.340	.802	.642
O Maint Daniel angele	se est 18.032		se est .011 .197	.627	.391
8. Waist Back Length	28.204 se est 21.113		se est .012	.021	.551
(OM)			.015	.725	.524
9. Waist	-309.399 se est 59.992		l .	1.723	.524
Circumference (OM)				.680	.461
10. Wrist	25.532 se est 6.283	1	l .	.000	.401
Circumference	35 531 0.203	30 631.004	30 031 .007	<u> </u>	<u> </u>

Regression Results for Sleeve Outseam / Neck Circumference

		β	β		Adjusted
Variable	Intercept	Sleeve O.	Neck C.	r	r ²
Females	•				
1. Biceps	-1.450	046	.977	.637	.404
Circumference, Flexed	se est 17.812	se est .026	se est .050	.007	10-1
2. Buttock	105.424	.361	2.140	.605	.363
Circumference	se est 49.509	se est .071	se est .139		
3. Chest	-68.837	.146	2.867	.693	.479
Circumference	se est 47.461	se est .069	se est .134		
4. Interscye II	46.308	.218	.675	.553	.304
	se est 20.754	se est .030	se est .058		
5. Shoulder Length	100.175	.090	016	.235	.052
	se est 10.910	se est .016	se est .031		
6. Waist Back Length	195.954	.270	.103	.348	.118
(NI)	se est 23.394	se est .034	se est .066		
7. Waist	-247.580	.075	2.988	.691	.476
Circumference (NI)	se est 48.879	se est .071	se est .138		
8. Wrist Circumference	41.063	.072	.226	.661	.435
	se est 5.207	se est .008	se est .015		
Males					
1. Biceps	-24.526	.032	.897	.677	.457
Circumference, Flexed	se est 18.020	se est .025	se est .038		
2. Buttock	-11.639	.441	1.941	.706	.497
Circumference	se est 40.276	se est .056	se est .084		
3. Chest	-123050	.322	2.464	.723	.522
Circumference	se est 45.662	se est .063	se est .095		
4. Interscye II	101.837	.081	.676	.525	.274
	se est 21.162	se est .029	se est .044		
5. Shoulder Length	95.334	.098	009	.261	.066
_	se est 9.830	se est .014	se est .021		
6. Waist Back Length	177.155	.310	.146	.467	.216
(NI)	se est 18.076	se est .025	se est .038		
7. Waist	-265.961	.171	2.700	.730	.531
Circumference (NI)	se est 47.375	se est .065	se est .099		
8. Wrist Circumference	31.143	.091	.234	.698	.486
	se est 5.597	se est .008	se est .012		

Regression Results for Stature / Weight

		β	β		Adjusted
Variable	Intercept	Weight	Stature	r	r ²
Females					
1. Biceps	335.099	.266	135	.865	.747
Circumference, Flexed	se est 11.953	se est .006	se est .008		
2. Buttock	739.357	.689	120	.906	.821
Circumference	se est 27.085	se est .015	se est .019		
3. Calf Circumference	306.417	.224	056	.761	.578
	se est 15.701	se est .008	se est .011		
4. Chest	827.628	.711	220	.846	.715
Circumference	se est 36.171	se est .020	se est .025		
5. Crotch Height	-224.681	031	.615	.897	.805
	se est 20.600	se est .011	se est .014		
6. Crotch Length (OM)	267.023	.237	.123	.672	.450
	se est 29.696	se est .016	se est .021		
7. Crotch Length,	95.162	.066	.107	.445	.195
Posterior (OM)	se est 23.793	se est .013	se est .017		
8. Interscye II	197.897	.141	.055	.588	.344
	se est 20.775	se est .011	se est .014		
9. Knee	249.713	.245	023	.847	.717
Circumference	se est 13.370	se est .007	se est .009		
Males					
1. Biceps	356.425	.218	111	.816	.664
Circumference, Flexed	se est 15.513	se est .006	se est .010		
2. Buttock	766.161	.544	119	.942	.887
Circumference	se est 20.883	se est .008	se est .013		
3. Calf Circumference	364.968	.207	085	.815	.664
	se est 15.082	se est .006	se est .010		
4. Chest	947.630	.636	255	.902	.813
Circumference	se est 31.307	se est .012	se est .020		
5. Crotch Height	-224.219	065	.630	.884	.782
	se est 20.890	se est .008	se est .013		
6. Crotch Length (OM)	328.366	.234	.075	.702	.491
	se est 30.737	se est .012	se est .020		
7. Crotch Length,	107.337	.056	.094	.469	.218
Posterior (OM)	se est 21.551	se est .008	se est .014		
8. Interscye II	327.512	.135	015	.551	.302
	se est 22.726	se est .009	se est .015		
9. Knee	256.262	.173	003	.863	.745
Circumference	se est 11.684	se est .005	se est .007		

Regression Results for Stature / Weight (Continued)

		β	β		Adjusted
Variable	Intercept	Weight	Stature	r	r ²
Females					
10 Knoo Hoight	-102.122	010	227	000	750
10. Knee Height, Midpatella	se est 13.821	.010 se est .007	.337 se est .010	.868	.753
11. Neck				077	450
	256.515 se est 12.483	.124 se est .007	.007	.677	.456
Circumference, Base			se est .009	054	400
12. Shoulder Length	49.364 se est 10.825	.001 se est .006	.057	.354	.122
13. Sleeve Outseam	-43.131	.011	se est .007 .353	.822	675
13. Sieeve Outseam	se est 17.590	se set .010	.333 se est .012	.022	.675
14. Thigh	528.576	.538	174	.905	.818
Circmference	se est 20.389	se est .011	se est .014	.505	.010
15. Waist Back Length	156.882	.079	.148	.621	.383
(OM)	se est 19.482	se est .011	se est .013	.021	.505
16. Waist	902.072	.978	432	.842	.708
Circumference (OM)	se est 49.025	se est .027	se est .034	.072	.700
17. Waist Front Length	163.600	.090	.108	.604	.363
(OM)	se est 18.152	se est .010	se est .013	.004	.505
Males	:				
10. Knee Height,	-96.913	.001	.340	.867	.752
Midpatella	se est 13.534	se est .005	se est .009		
11. Neck	332.187	.140	020	.727	.529
Circumference, Base	se est 14.589	se est .006	se est .009		
12. Shoulder Length	66.063	8.744	.048	.298	.086
	se est 10.648	se est .004	se est .007		
13. Sleeve Outseam	-8.871	.009	.342	.801	.640
	se est 18.056	se est .007	se est .012		
14. Thigh	584.748	.444	194	.919	.845
Circmference	se est 19.335	se est .007	se est .013		
15. Waist Back Length	159.670	.096	.143	.685	.467
(OM)	se est 19.728	se est .008	se est .013		
16. Waist	865.870	.774	337	.906	.820
Circumference (OM)	se est 36.815	se est .014	se est .024		
17. Waist Front Length	155.620	.099	.106	.660	.434
(OM)	se est 19.034	se est .007	se est .012	1	

Regression Results for Buttock-Knee Length / Eye Height, Sitting

		β	β		Adjusted
Variable	Intercept	Eye Ht.	Buttock-K.	r	r ²
Females					
1. Abdominal	91.387	192	.479	.475	.223
Extension Depth, Sit	se est 24.954	se est .035	se est .037		
2. Elbow Rest Height	21.690	.524	314	.675	.454
	se est 17.270	se est .024	se est .025		
3. Functional Leg	-10.913	.198	1.487	.930	.864
Length	se est 20.018	se est .028	se est .028		
4. Overhead Fingertip	100.277	.924	.908	.864	.747
Reach, Sitting	se est 29.848	se est .041	se est .044		
Males					
1. Abdominal	39.988	064	.424	.399	.157
Extension Depth, Sit	se est 26.457	se est .034	se est .038		
2. Elbow Rest Height	-4.065	.545	313	.661	.436
	se est 17.631	se est .023	se est .025		
3. Functional Leg	40.933	.150	1.496	.927	.860
Length	se est 18.553	se est .024	se est .027		
4. Overhead Fingertip	126.967	.885	.979	.857	.733
Reach, Sitting	se est 29.521	se est .038	se est .042		

Regression Results for Functional Leg Length / Overhead Fingertip Reach, Sitting

		β	β		Adjusted
Variable	Intercept	Overhead	Functional	r	r ²
Females					
1. Buttock-Knee,	41.326	.002	.537	.924	.853
Length	se est 11.304	se est .014	se est .015	"5"	.000
2. Eye Height, Sitting	191.074	.503	105	.758	.573
	se est 20.490	se est .025	se est .027		
3. Sitting Height	276.201	.509	084	.764	.583
	se est 20.994	se est .026	se est .028		,,,,,
4. Thumbtip Reach	41.540	.213	.403	.852	.725
	se est 18.752	se est .023	se est .025		
Males					
1. Buttock-Knee,	20.314	.018	.526	.924	.854
Length	se est 10.479	se est .011	se est .013		
2. Eye Height, Sitting	215.278	.488	108	.742	.549
	se est 20.392	se est .022	se est .025		,,,,
Sitting Height	310.326	.505	105	.750	.562
	se est 20.771	se est .023	se est .026		
4. Thumbtip Reach	62.183	.226	.382	.835	.696
	se est 18.690	se est .021	se est .024		

Regression Results for Functional Leg Length / Sitting Height

		β	β		Adjusted
Variable	Intercept	Sitting Ht.	Functional	r	r ²
Females					
Buttock-Knee, Length	57.440 se est 12.831	029 se est .017	.548 se est .011	.924	.853
2. Eye Height, Sitting	-62.090 se est 7.642	.949 se est .010	008 se est .007	.977	.954
3. Overhead Fingertip Reach, Sitting	53.302 se est 29.841	.795 se est .040	.580 se est .040	.880	.774
4. Thumbtip Reach	95.820 se est 22.702	.085 se est .031	.556 se est .020	.830	.688
Males					
Buttock-Knee, Length	30.079 se est 11.985	001 se est .015	.542 se est .010	.923	.852
2. Eye Height, Sitting	-73.240 se est 7.384	.946 se est .009	3.578 se est .006	.977	.954
2. Overhead Fingertip Reach, Sitting	32.947 se est 29.771	.795 se est .036	.621 se est .024	.875	.765
4. Thumbtip Reach	114.374 se est 22.783	.098 se est .027	.550 se est .019	.809	.654

Regression Results for Eye Height, Sitting / Overhead Fingertip Reach, Sitting

Variable	Intercept	β Overhead	β Eye Ht.	r	Adjusted r ²
Females					
Buttock-Popliteal Length	54.525 se est 19.436	.427 se est .021	190 se est .037	.730	.532
2. Functional Leg Length	93.737 se est 32.757	.822 se est .035	236 se est .062	.794	.629
3. Knee Height Sitting	23.180 se est 16.719	.454 se est .018	151 se est .031	.811	.657
4. Sitting Height	92.720 se est 7.311	.036 se est .008	.965 se est .014	.977	.955
Males					
Buttock-Popliteal Length	59.742 se est 18.110	.387 se est .017	148 se est .031	.720	.518
2. Functional Leg Length	150.918 se est 30.549	.767 se est .029	217 se est .052	.785	.616
3. Knee Height Sitting	50.174 se est 16.096	.394 se est .015	0 74 se est .027	.790	.623
4. Sitting Height	102.246 se est 6.955	.033 se est .007	.966 se est .012	.978	.956

Regression Results for Thumbtip Reach / Eye Height, Sitting

	٠	β	β		Adjusted
Variable	Intercept	Eye Ht.	Thumbtip	r	r ²
Females					
1. Buttock-Knee,	73.767	.106	.591	.779	.606
Length	se est 19.909	se est .028	se est .025		
2. Functional Leg	42.078	.256	1.059	.839	.704
Length	se est 29.629	se est .042	se est .037		
3. Knee Height Sitting	-4.843	.122	.583	.857	.734
	se est 14.872	se est .021	se est .018		
4. Overhead Fingertip	77.629	.856	.829	.885	.782
Reach, Sitting	se est 27.742	se est .039	se est .034		
Males					
1. Buttock-Knee,	67.894	.125	.558	.767	.587
Length	se est 19.037	se est .024	se est .022		
2. Functional Leg	81.802	.243	1.005	.817	.667
Length	se est 29.106	se est .037	se est .033		
3. Knee Height Sitting	7.453	.152	.535	.837	.700
_	se est 14.690	se est .019	se est .017		
4. Overhead Fingertip	77.558	.841	.858	.875	.765
Reach, Sitting	se est 28.164	se est .036	se est .032		

Regression Results for Thumbtip Reach / Functional Leg Length

Verieble	1-4	β Functional	β Thumbtip		Adjusted r ²
Variable	Intercept	1 unctional	mumbup	r	1
Females					
1. Buttock-Knee,	39.099	.525	.022	.924	.853
Length	se est 9.900	se est .017	se est .023		
2. Eye Height, Sitting	400.046	.238	.154	.537	.286
	se est 23.229	se est .039	se est .055		
3. Overhead Fingertip	245.920	1.162	.877	.921	.848
Reach, Sitting	se est 32.057	se est .054	se est .076		
4. Sitting Height	487.824	.262	.155	.557	.309
	se est 23.688	se est .040	se est .056		
Males					
1. Buttock-Knee,	23.725	.525	.029	.924	.854
Length	se est 9.556	se est .014	se est .019		
2. Eye Height, Sitting	413.439	.226	.179	.522	.270
	se est 23.664	se est .035	se est .048		
3. Overhead Fingertip	234.639	1.207	.867	.918	.843
Reach, Sitting	se est 32.146	se est .047	se est .064		
4. Sitting Height	516.978	.246	.175	.531	.280
	se est 24.274	se est .036	se est .049		

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